THE

MA, GAZINE

DESERT ON PARADE

MARCH 1 to 9, 1941 IMPERIAL, CALIFORNIA



PLAN your desert trip to include one or more days at the Imperial County Mid-Winter fair—a nine-day exposition of the arts and crafts and agricultural products of an area once known as the most arid region in America.

Paved highways lead to the Imperial valley, desert flowers will be in blossom, and perhaps you can combine your trip to the Mid-Winter fair with an excursion into some of the scenic canyons or rare mineral fields to be found on the Colorado desert.

Imperial's Mid-Winter fair is not just a carnival for your entertainment — its mammoth exhibit buildings are filled with the products of soil and factory, the things produced by men and women who came to the desert and have proved there is wealth as well as health in this great sunlit region of the Southwest.

You will marvel at the variety of fruit and vegetable exhibits—produced at a period of the year when the greater part of the United States is just digging out of a long cold winter.

El Centro, Brawley, Calexico, Imperial and other Imperial valley towns located conveniently close to the fair grounds have ample accommodations for you at moderate rates.

ROCK COLLECTORS

The Rockhound fraternity in Imperial valley will have a colorful array of the semi-precious stones and minerals found in the Imperial county desert area, on exhibit in the main exposition building at the fair grounds.

Imperial County Mid-Winter Fair

IMPERIAL, CALIFORNIA

Admission to the fair grounds for adults is 25c day and 10c nights, and 10c for children. For premium list or additional information write D. V. Stewart, Secretary, Imperial county Fair, Imperial, California.

Prizes to Amateur Photographers

Every month the Desert Magazine offers two cash prizes of \$5.00 and \$3.00 for the best amateur desert photographs submitted. Pictures are limited to the desert, but there is no restriction as to the residence of the photographer. There is a wide range of subjects — rock formations, flowers, desert animals and reptiles, canyons, trees, dunes, prospectors, Indians—in fact anything that belongs to the desert.

RULES—Not more than four prints may be submitted by one person each month. Prints must be $3\frac{1}{2}x5\frac{1}{2}$ or larger, glossy. Winners are required to furnish glossy enlargements or negatives, if requested. Details as to camera, film, time, exposure, filter, etc., must accompany each entry.

Pictures submitted in the February contest must reach the Magazine office by February 20. Winners will be announced and the prize pictures published in the April number. For non-prize-winning pictures accepted for publication \$1.00 will be paid for each print. Non-winning pictures will be returned only when stamped envelopes or photo-mailers are enclosed.

ADDRESS CONTEST EDITOR
DESERT MAGAZINE — EL CENTRO, CALIFORNIA



When you go EAST or come WEST you'll find BLYTHE the most convenient place for an overnight stop. But that is not all, for BLYTHE is also the gateway to many of the scenic wonders of the desert.

To mention a few there are the Lost Palm Canyon, Ehrenberg Ruins, Black Point gem fields, fishing at Lake Havasu, hunting in the Colorado river

valley and, nearby, the sensational Mystic Mazel



Plan to visit BLYTHE—either on your next trip, or NOW!

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CALIFORNIA

YOUR GATEWAY TO SEEING ARIZONA'S AND CALIFORNIA'S WONDERLANDS

For further information, specific data write to the Secretary, Palo Verde Chamber of Commerce, Blythe, California

Calendar

- JAN. 31-FEB. 2 Winter Sports Carnival, University of Nevada, Reno. Joseph McDonnell, manager.
- FEB. 1-2 Second annual Gila river Roundup, Safford, Arizona. Hugh Bennett, arena director; Graham county junior chamber of commerce, sponsors. \$1250.00 prize money.
- 1-20 Art exhibit at Desert Inn art gallery, Palm Springs, California. Desert paintings of Agnes Pelton, Burt Proctor, John Hilton and Clyde Forsythe.
- Palm Springs Desert Museum to conduct trip to Wonderland of Rocks in Joshua Tree national monument, south of Twentynine Palms, California.
- 8 Trip from Palm Springs Desert Museum to Cahuilla Indian "fish traps" and petroglyphs and Travertine Rock.
- 15-22 Western mineral exposition, State Exposition building, Exposition park, Los Angeles, California.
- 8-9 Sierra club trip to left fork of Palm Canyon. Driving distance from Los Angeles 230 miles. Dr. Marko J. Petinak, leader.
- Palm Canyon trip planned by Palm Springs Desert Museum.
- 13-16 World Championship rodeo, state fair grounds, Phoenix, Ariz.
- 15-16 Horse show and Hunter trials, Palm Springs, California.
- 17-22 Annual Livestock show, Tucson, Arizona.
- 20-22 Second annual Desert Cavalcade, pageant-fiesta at Calexico, Calif.
- 20-23 Riverside county fair and Coachella valley date fiesta, Indio, California. George M. Ames, manager.
- 20-MAR. 1 Paintings of Paul Lauritz to be shown at Desert Inn art gallery, Palm Springs. First of series of one-man shows.
- 21-23 Fiesta de los Vaqueros and rodeo, Tucson, Arizona.
- 21-23 Mexicali Rose carnival and annual convention of International Four States Highway association at Mexicali, Baja California, Mexico. Sr. Alberto F. Moreno, manager.
- Trip up Murray Canyon, sponsored by Palm Springs Desert Museum, Lloyd Mason Smith, director.
- 22-23 Orocopia mountain trip scheduled by Sierra club. 350 miles round trip from Los Angeles. "Andy" Andrews, leader.
- 23-MAR. 2 Arizona State Citrus show and parade of floats, Mesa, Arizona. Rulon T. Shepherd, chairman.
- Variable dates—Buffalo, deer and antelope dances at various Indian pueblos of New Mexico.



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Archaeologists exploring prehistoric Indian ruins sometimes make strange discoveries. In the accompanying story, M. R. Harrington, curator of Southwest museum in Los Angeles, takes the readers of Desert Magazine down into a dusty Nevada cave where he made one of the most unexpected finds in his long experience in archaeology.

By M. R. HARRINGTON

Ancient Hunters of



the pit in Lovelock cave.

the Nevada Desert

Y adventure in Lovelock cave began in 1924 when I was sent to northern Nevada by the museum of the American Indian, Heye Foundation, in New York, to continue an archaeological dig that had been started, with notable success, by L. L. Loud of the Museum of Anthropology of the University of California.

Loud met me in Lovelock. It did not take us long to scrape together an outfit and set up our headquarters in an abandoned cabin near the cave, 20 miles south

As we toiled up the talus slope that first morning toward the limestone ledge where the cave lay, I noticed traces of a dump, rotting timber and the washed-out remains of a wagon road.

"Looks like a miner's road," I remarked, out of breath from the steep climb. 'What were miners doing in an Indian cave?"

'They were digging bat guano," explained Loud. "A mining company took a number of carloads out before they had to quit. You'll never guess why they

stopped work."
"I haven't the slightest idea," I ad-

Well, they say the miners reached a level where the deposit was more Indian relics than guano, and it simply did not

pay to sift them out!" Loud chuckled. "It sounds impossible, but when you figure that by 'Indian relics' is meant not only whole specimens, but broken pieces of mats and baskets, and tule rushes and grass brought in by the Indians for bedding, the yarn may really be true."

By this time we had reached the ledge. We walked into the cave through a short tunnel the miners had cut near the north end to admit the little cars in which the guano was transported from the interior of the caverns to the waiting wagons.

I noticed that the cave was long and narrow, its long axis parallel to the face of the cliff. Down toward the other end I could see daylight streaming in through a low natural opening. As my eyes grew accustomed to the semi-darkness I discerned a rocky ridge running down the center of the chamber, nearly to the southern end. The air was fairly fresh, but smelled strongly of bats.

Loud stepped up on the ridge and

"The Indian deposits," he said, "lie between this central ridge and the walls of the cave, also down in the south end. I have gone through most of them at the north end, but from the center southward they are untouched, except that the guano miners skimmed off the top. I think the deposits run deeper at this

He showed me where he had established reference points for survey purposes, most of them plumb lines suspended from nails driven into the limestone roof.

"The deposits I worked," he went on, were so irregular and so scattered among the rocks that I could not run regular archaeologist's trenches. However I recorded each discovery with reference to its depth from the original surface and its distance from the two nearest reference points, so I was able to locate everything on my map of the cave afterward."

I picked out a promising spot, adjusted my dust mask and the miner's light on my cap, and started to dig. As usual, I dug with a five-inch mason's pointing trowel. I threw the discarded "back-dirt" on a square of canvas, to be carried away and dumped.

Lovelock cave was dark and dusty, but it proved to be the most fascinating place to work I had ever seen. Almost every trowelful yielded some bit of Indian handiwork, even such perishable materials as skin and feathers, perfectly preserved by the dryness. Every article was strictly aboriginal. If there had been anything of white man's manufacture in the cave, it had been removed with the

As the work went on we learned that the deposits were composed of layers of rubbish laid down through centuries of habitation of the cave by primitive tribesmen. Our treasured finds were articles accidentally lost by the Indians in the grass or tules upon which they slept, or discarded odds and ends.

In addition, they had dug holes from time to time in the cave floor for storage purposes, lining them with old mats and discarded baskets to keep out the dust before they cached their valuable dried fish, pine nuts, rabbit-nets, dance regalia or whatever they wished to store. Usually they had returned for the property, and we found the pit empty; but sometimes they didn't. It was always a thrill for the archaeologist to find such a cache.

We watched the layers carefully as we dug, and if they appeared broken we immediately looked for a storage pit.

I shall never forget one break in the layers that I investigated. By peeling off the surface carefully I found that the break was circular and about three feet in diameter.

"I've found a big storage pit," I called to Loud. "What'll you bet there's nothing in it?" Loud came over and was watching when I struck a layer of rocks.

"I'm glad I didn't bet," he said. "Judging from those rocks the pit has not been disturbed since the owners left it. It must have something in it!"

I pulled out the layer of rocks, just filling the circle of the pit, and continued my excavation in the loose earth below. Finally I struck something that gave a dull, hollow sound. I brushed this off carefully and found it to be a huge inverted bowl-shaped basket. Big as it was, it did not fill all the disturbed area, so I dug down beside it. More baskets, all large, all bowl-shape, all lying face down!

I turned to Loud who had been carrying off the back-dirt as I took it out.

"If this were northeast Arizona instead of Nevada, I'd say we'd found an ancient Basketmaker burial," I said. "These baskets are a big find without anything else. Let's photograph and record them before we go any farther!"

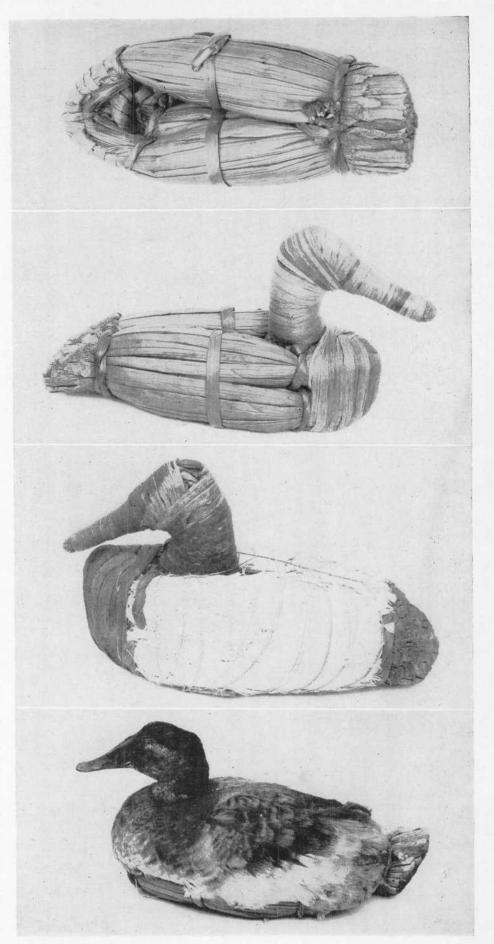
Loud agreed, but I could see he was itching to look under the baskets and I admit I was myself; but I got my camera and flash light ready while he was busy with tape line, compass, note-book and pencil.

Finally we raised the baskets. Sure enough, under them lay something wrapped in a large net. We recognized it as a mummy even before we saw the long black hair streaming from under a small basket at one end of the shrouded figure.

Just then my Pit river Indian friend Willis Evans, who had joined the expedition a few days before, came over to see what we had found.

"Why don't you take the basket off its face?" he asked.

"I am rather dreading it," I replied.



The three upper pictures show ancient decoys found in Lovelock cave, the two upper figures being unfinished models. The lower picture is a decoy made by the Nevada Painte Indians of today.

"I have a hunch the face will not be very pleasant to look at."

Willis jumped down into the hole, and raising the basket, took one peep—then let it fall hastily and scrambled out without a word.

"Aren't you going to let us see it?" Loud asked.

"No!" came the rather shaky reply as Willis went back to his work. He went home that evening in apparently good health, but he did not show up again for three days. We learned that he had spent most of that time in bed on his doctor's orders, because of continuous hiccups. Probably, although Willis won't admit it, the sight of the mummy's face had given him some form of nervous indigestion. Lovelock cave was Willis' first archaeological job, but by no means the last.

When I finally took off the basket both Loud and I agreed that the mummy's face was the most ghastly we had ever seen, with its mouth wide open, its eyes dried but still staring, and its hair streaming out in every direction. I too replaced the cover rather hastily, and the mummy traveled from Nevada to New York with the basket still in place.

Another Pit Discovered

A little later I found another break in the layers. I thought it might be another mummy-pit, and I dug it with great care, looking through each trowelful with extra diligence for fear I might miss something. Deeper and deeper I dug, finding only an occasional scrap of basketry, and once a good sized bowl basket—with nothing under it.

The hole was so dusty I had to wait five minutes for the dust to settle, whenever I threw out my back-dirt, in order to see what I was doing. I was beginning to lose hope when my trowel hit stone! Excitedly I uncovered and removed several boulders. Then I struck something that had a sort of give to it. With great care I laid bare a small area of it. It was matting, an Indian mat made of tule rushes! My hand shook as I followed it out, brushing it clean as I went. It looked suspiciously like the bottom lining of a storage pit. I investigated the sides. They were lined, too, with pieces of old baskets. It was a storage pit, an empty one at that, without even a little dried fish or a pine nut to tell me what had been cached in it. What a let-down! The old timers had come back to their cache and cleaned it out.

I went outside the cave to take a smoke. Then I returned to salvage the matting and basket fragments that had served as linings. We had found many such, but no one could tell when a new



Entrance to Lovelock cave is near the top of the hill in the center of this picture.

weave or decorative pattern might appear, so we carefully saved every scrap.

Sliding into the pit I raised the matting and shook the dust from it. When the cloud had cleared I looked down in the hole to see if there was anything more. In the dim bottom of the pit I spied a large package neatly wrapped in matting and tied with fiber rope! The other matting had been only a cleverly arranged false bottom, put in to fool storage-pit robbers!

What was in that package? The first thing I thought of was a child mummy, yet the thing did not look like a mummy bundle. But if not a mummy, then what? I took my flashlight photograph, made my measurements, lifted the mysterious package and carried it out of the cave. Attracted by my call, my companions came running.

Then came one of those unexpected things that keep the life of an archaeologist from ever being dull. I carefully untied the cords and opened the matting. The bundle was full of ducks!

At first look they appeared the real thing, but closer inspection showed that they were cleverly and strongly constructed of tules and painted to represent life. Most of them were imitations of canvas back ducks with real feathers, held in place with fine fiber strings. They were decoys! With them were some spare feathers and several bundles of snares.

Strangest Find in 25 Years

I can truthfully say that bundle of ducks—there were eleven of them—was the most unusual and unexpected find I had made in a quarter-century of digging old Indian ruins.

How old were the ducks? Just where do they fit into the ancient history of Nevada? We did not attempt to answer until we had finished digging out the deep deposit in the extreme south end of the cave and were better prepared to consider the picture as a whole.

Here we found a situation dear to the heart of the archaeologist—an area un-

disturbed and free from large stones and deep enough for stratigraphic work — the study of the strata or layers of the deposit.

We peeled this down from the top, keeping the articles from each level separate. Thus we were able to compare the collections from all the levels—with each other and with material collected elsewhere in the Southwest.

Lived 2000 Years Ago

We learned that the first human inhabitants of the cave who were responsible for the formation of the deepest and consequently oldest levels, were very similar to the ancient Basketmakers of New Mexico and Arizona who lived about 2,000 years ago. This we learned by comparing their utensils, weapons and implements. Both the early Lovelock cave people and the Basketmakers, for example, hunted their game and made war with that ancient weapon, the atlatl or dart-thrower, the bow and arrow being as yet unknown. The greatest difference between the two people lay in the fact that these early Nevadans were ignorant of agriculture, while the Basketmakers raised an abundance of corn.

From some source, at a later date, the bow and arrow was introduced and became popular. However, the old fashioned dart thrower lingered for a while before passing out of the picture in favor of the more efficient weapon. Basketry, at first resembling not only the work of the ancient Arizona Basketmakers but to some extent the products of the northern California tribes, became more and more like that of the present northern Paiute Indians.

The decoy ducks, starting in about the time the bow and arrow was introduced, probably early in the Christian era, continued right on up to the present day. My bundle of ducks, judging from the fact that the pit containing them was dug from a point 32 inches below the surface, must be at least two or three hundred years old.

Our deduction that the decoys were used up to recent times was supported by old Skinny Pascal, a Paiute who worked on the expedition for a while. He remembered that his people had used similar decoys, anchoring them in Humboldt lake while the hunters hid behind blinds to shoot with arrows the ducks that were attracted by the imitation birds. He also mentioned the use of a net to catch ducks.

Later I was successful in buying a modern Paiute decoy from an Indian at Stillwater, Nevada. It was similar to the old examples, except that the actual skin of a duck was spread over the tule form, instead of separate feathers and paint.

Here is a two-day trip on the Mojave desert for motorists who like to get away from the paved roads and explore rock formations Nature has created at many places on the desert. The Providence mountain area described in this story is rich in historical back-ground and in natural phenomena. And if you don't want to camp with the spooks in Banshee canyon, you'll find welcome in the campground at Mitchell's Cavern

We Camped in Banshee Canyon

By WALTER FORD

IM HARRINGTON, veteran prospector of the Mojave desert, first told me about the Hole-in-the-Wall. I stopped at Jim's camp near Essex, California, late one

He was busy feeding his "family" when I approached, the family consisting of two burros and a nondescript dog. He paid little attention to me until his chores were over, and then extended a hearty welcome.

Jim was a natural-born spinner of yarns, and I spent the evening listening to his lusty tales of mountain and desert. Some of his stories would have made Baron Munchausen hang his head with shame—but whether they were truth or fancy, the prospector took them all in his stride.

'Know anything about the Hole-in-the-Wall country, Jim?"

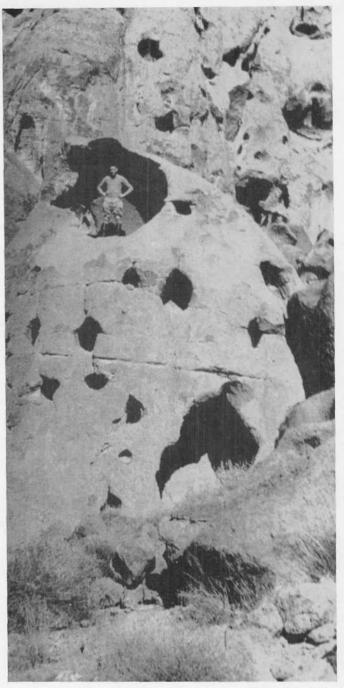
I asked during a temporary lull in his oratorical flow.
"Plenty," was the reply. "Once ran cattle up there and those pesky Chemehuevis used to drift over from the Colorado river and give us no end of trouble."

"But why," I persisted, "was it named after a single hole

when the whole section is literally riddled with holes?"
"Yes, I know," Jim agreed, "there must be a million holes up there, but the fact is none of them has anything to do with the name. Back in the 80s when Dominguez ranch was flourishing, cattle used to graze along the base of Providence mountains clear up to where Cima now stands. One evening about dusk several of the boys from the ranch were looking for some strays when they came upon a couple of Indians with the missing cattle in tow. They chased the redskins up a bottlenecked canyon that seemed to end in a blank wall, and when they thought they had the culprits they dismounted and disappeared right into the wall. At least that's the story they brought back to the ranch, so from then on the section was known as the Hole-in-the-Wall."

Old Jim paused, as if to note the effect upon his listener, then continued, "To the left, just as you enter the draw there is a ledge which drops down into a chamber about 75 feet deep. I heard that some of the soldiers who used to be stationed around Government Holes forced a bunch of Indians over the ledge but I never went down there to see if it was true. You may find something if you can get down there."

Such was the tale that Jim Harrington, prospector and raconteur extraordinary, left with me on that desert night. Although his stories had been leaning somewhat away from veracity most of the evening, he knew I was planning a trip into the Hole-in-the-Wall country, and Jim was not the kind of a prospector who would mislead a fellow traveler. His story filled me with a great desire to descend into the depths of that cham-

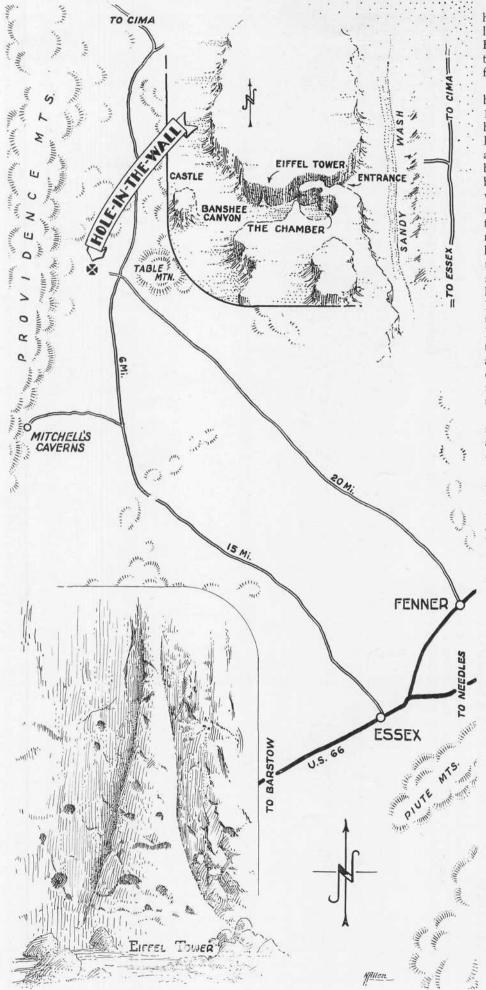


Nature has carved thousands of cavities and windows in the rocky walls—and if you try to figure out which one gave "Hole-in-the-Wall" its name, you'll never find the answer.

ber. I have since learned that old Jim has made his last strike and is now resting beneath the desert he loved. Good prospect-

Later, in Los Angeles, my story so intrigued Jack Lanz, a member of the Adventurer's club, that he decided to go with me and make the descent to the floor of the chamber. With two full days ahead in which to explore the region, we arranged to reach Essex at night so that we could make an early start from there the next morning. The road from Essex had been greatly improved since my previous visit so the 25-mile run was made in approximately half an hour.

The ledge which was our first objective is about three-fourths of a mile from the roadway. The desert sun was warm that day and the several trips necessary to carry our camping equipment, rope, and cameras from the car somewhat dampened our enthusiasm for strenuous activity. How much easier it would



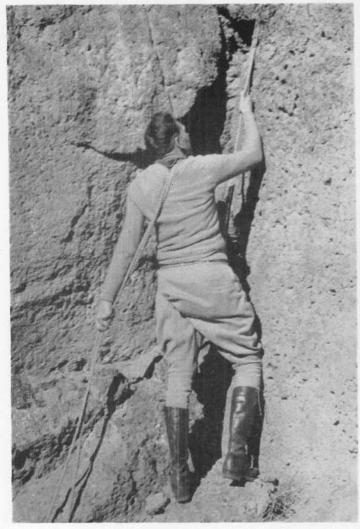
have been to relax in the shade under a ledge and do our exploring *mañana!* But time was passing. We had much ahead to see, so we prepared to descend to the floor of the chamber.

A toss of a coin and—heads! I was to be the first to make the descent. With a 100-foot rope securely tied around a large boulder I crawled over the over-hanging ledge and found myself dangling in midair with the next projecting rock 25 feet below! We had assumed that there would be footholds all the way down but here was a condition with which we had not reckoned. Hastily throwing a couple of turns of rope around one of my legs, I let myself drop hand-over-hand to the rock below. From that point I could see that the remaining distance would be over steep, sandstone slopes with few footholds anywhere. Playing out the rope as I went I began a series of zig-zags only to find that my momentum increased as I descended. When about 10 feet from the bottom the rope slipped from my grasp and I landed in a heap at the bottom. My companion was more fortunate. I was able to direct his journey with no casualties to the camera equipment or himself.

From the floor of the chamber there is much to be seen that is not visible from above. Here beneath the flow of lava that covers the upper elevations are layers of conglomerate and sandstone containing shells and pieces of petrified wood — mute evidence of the time when placid lakes covered the flats and verdant forests grew on the now barren hills. Steep walls extend upward several hundred feet at some points, carved into every conceivable shape by the eternal onslaught of wind and water.

We found no evidence of the conflict Harrington had mentioned in his recital. A few bits of pottery and fire-blackened stones indicated that whatever Indians had been there had been very much alive. Perhaps we missed the "something" Jim had in mind but we did find a wonderland that has no parallel in desert scenery. Something to which we would return again and again when the more familiar places have lost their lure.

We had eaten our lunches and were reclining in the shade when suddenly, with a whir and a thud-our rope landed at our feet! For a few startled seconds we looked at each other, then sprang to our feet. Not a sound from above. Hurriedly examining the rope we found that it had been untied. We had both tested the knots before making the descent so there was but one conclusion—it had been untied by human hands! In a mad scramble we gathered our equipment and made for the only possible exit—a narrow ravine which dropped vertically 30 feet to the canyon below. At that point there was no preparation. We quickly belayed the rope around a boulder and went over the edge. There is little recollection of our hasty ascent





Walter Ford descending by rope into the "chamber."

One of the weird figures in Banshee canyon.

other than having to climb rickety ladders at various levels. When we arrived out of breath where we had left our camping equipment, we found to our chagrin and relief—two friends with whom we had discussed the trip and who decided to join us. When explanations had been made and ruffled feelings smoothed over, the augmented group decided to go back to the lower level and make camp for the night.

From a width of several hundred feet the entrance to the Hole-in-the-Wall narrows down to a ravine barely wide enough to admit one's body. At two places there are perpendicular drops of approximately 20 feet each, where some thoughtful person has placed ladders for the convenience of visitors. At the bottom the ravine opens into an amphitheatre which has been aptly named "Banshee canyon," and which is a veritable wonderland of stone. Here Nature created a weird menagerie of rock figures. Slender towers and minarets reach to lofty heights from the canyon floor while strange animal and human forms glare menacingly upon their fantastic domain. Directly across from the opening of Banshee canyon is the Castle, a huge mass of stone which rises nearly 100 feet and which defied any attempts of our group to reach its top.

Banshee canyon by day presents an air of peace and quiet. At night the scene changes. With the wind in the right direction, an air of dark foreboding settles down over the canyon like a pall of gloom. It was on such a night that we made our camp. During the preparation of our evening meal we had heard nothing unusual, but in the quiet that followed strange sounds began to fall upon our ears. The cries of horned owls which live in the pockets along the walls, mingled with the sighing and moaning of the wind as it swept in and out of the recesses and up the ravine, sounded like the wailing of a banshee horde on its way to a final resting place.

It was hardly a restful location for jittery nerves and flighty imaginations. Occasionally one of the group would ask, "what?", then sheepishly realize that no one had spoken and settle back into silence.

Abruptly, one of the late arrivals arose and exclaimed, "I've had enough of this! You fellows can stay here if you like, but I'm going back to the car. Coming, Bill?" Bill readily agreed that he was.

Nothing short of the Banshee's personal appearance could have routed my remaining companion from the floor of the canyon that night. The strenuous activities of the day left us with but one desire—to get into our sleeping bags as quickly as possible.

On a recent trip to the Hole-in-the-Wall I left the main road at a point 18.5 miles from Essex and proceded to Dominguez ranch. A desert photographer and friend, Glenn Edgerton, had told me about seeing a huge petrified redwood log imbedded in the side of a mountain back of Dominguez ranch and I was anxious to see it. The road appeared to end at the ranch, so it was necessary to inquire for directions.

Mrs. Murphy, wife of one of the brothers who own the ranch, was at home. When I asked her about directions for reaching the petrified log she hesitated.

"So many people have been going up there and breaking pieces from the log we've had to close the area to visitors," she explained. She is a kindly woman, however, and when I assured her we would not molest the log she told me how

to reach it. In this connection I want to remind Desert Magazine readers that the Hole-in-the-Wall area is private property. The Murphys own the place and on many occasions have been subjected to annoyance and expense by thoughtless visitors who left gates open and even de-stroyed ranch property. Visitors with prop-er regard for the rights of the owners, who have cattle on this range, are welcome to visit the Hole-in-the-Wall.

Much could be written about the early history of Dominguez ranch, which Mrs. Murphy estimated was built over 100 years ago. Directly back of the ranch house are the ruins of the mill which refined the ore from the Silver King mine, one of the richest producers in early mining history. Long before the coming of the railroads to the desert huge wagons carried ore and provisions between the ranch and the town of Mohave over a route that must have, by comparison, made the later trek of the twenty-mule teams from Death Valley seem like modern transportation.

One of the crude wagons is now on exhibition at Mitchell's caverns, a few miles west of the ranch. During my conversation with Mrs. Murphy she mentioned the Hole-in-the-Wall and gave me an authentic version as to how the region was named. According to her story, about 25 years ago a prospector moved from Wyoming and built a cabin in the section which he called the Hole-in-the-Wall, not because of its many thousand holes but merely because it resembled a location near his former home.

Visitors to the Hole-in-the-Wall area should plan to make it a two-day trip one day to explore Banshee canyon, and another for Mitchell's caverns. Jack and Ida Mitchell have cabins and dining room at their lodge, and an interesting museum of Indian and natural relics from the entire Providence mountain area. An excellent camp ground is also available at the

Artist, botanist, geologist, rock-climber, photographer-will all find something of particular interest in this region. And if you want to experience a spooky night, just try camping in Banshee canyon when the wind is whistling through the holes in the rocks.

BINDERS for your Desert Magazines

Because of the wealth of accurate information they contain and the fine reference index published each October, 95% of all Desert Magazine readers are keeping their back files.

In order to help preserve these files, the publishers furnish a free loose-leaf binder with space for 12 issues, to each renewing subscriber who pays the full \$2.50 rate direct to office of publication. Those who take advantage of the lower rate of two years for \$4.00 or three for \$5.00 will receive but one binder. Extra binders may be obtained at \$1.00 each.

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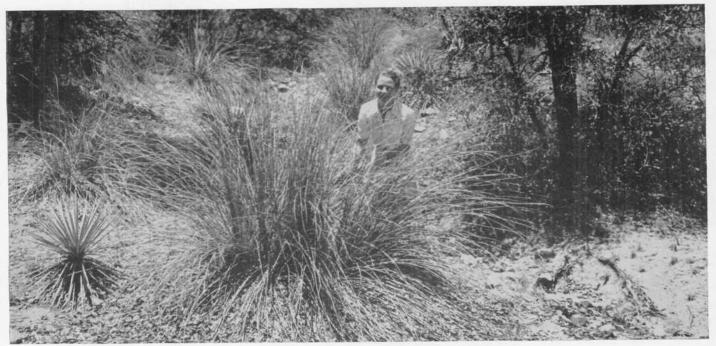
Address: DESERT MAGAZINE, El Centro, California

TRUE OR FALSE

Here is another set of questions for those who are eager to learn more about the Great American desert—its history, geography, its

nature and lore. Not many readers are qualified to answer more than 10 of these questions correctly, but there is a wide fund of information in this test for those who wish to learn more about the arid Southwest. An honest-to-goodness Desert Rat will know the answers to at least 15 of the questions. The answers are on

- 1—The Colorado river once flowed through New Mexico territory. True..... False.....
- -The Colorado desert is located in the state of Colorado. True..... False.....
- 3-The Needles peaks near Needles, California, derive their name from their pinnacle-like shape. True..... False......
- 4—Chrysocolla is generally found in iron ores. True...... False...... 5—Arizona was the last territory to gain statehood. True...... False.......
- 6-Navajo Indians were cultivating corn and cotton when the Spaniards came to the Southwest. True...... False......
- 7-Nearest postoffice to the Joshua Tree national monument is Victorville, California. True....... False.......
- 8-Whipple Barracks are located at Prescott, Arizona. True...... False......
- 9-Water in the Great Salt lake is gradually receding. True...... False.......
- 10—The tarantula is more poisonous than the sidewinder. True...... False.......
- 11—Yucca is a member of the cactus family. True...... False...... 12-Wild turkeys are found in the White mountains of Arizona.
- True..... False.....
- 13—White Sands national monument in New Mexico derives color from gypsum. True..... False.....
- 14-Most of the species of agave or wild century plant native in the Southwest, die after one flowering season. True...... False......
- 15-Lake Mead recreational area is administered by the Bureau of Reclamation. True..... False.....
- 16—Arches national monument is located in Utah. True...... False.......
- 17—El Tovar hotel at Grand Canyon is named after a Spanish Conquistador. True..... False.....
- -California was still Mexican territory when the Jayhawkers made their famous trek across Death Valley. True...... False......
- 19—An arrastre is used for mining placer gold. True...... False......
- 20—Several species of hummingbirds live on the desert. True...... False......



This is the Bear grass Mrs. Baker gathered to line the mescal pit.

Desert Dinner --- Apache Style

Louise Baker, living with her writer-husband in a remote canyon in Arizona's Dragoon mountains, invited her friends to dinner and then served them an Apache meal—foraged from the native shrubs of the desert. If you have wondered how the nomad tribesmen of the Southwest were able to live off a country as arid as southern Arizona, here is a story that will give you some of the answers.

By LOUISE BAKER

year ago I "abandoned civilization," as my sympathetic friends labeled it, to live in an adobe house in a remote canyon in the Dragoon mountains of Arizona, 90 miles from the nearest neon lights.

"What'll you ever do with your time?" was the mournful question with which my bridge-playing friends bombarded me. "It's not so bad for your husband whose interest in Indian lore is professional—but what do you care if an Apache squaw once ground corn on the spot that is now your kitchen doorstep?"

As cheerfully as possible, I enumerated my diversions. I'd cook, read, knit, gaze at the scenery, and get a nice suntan. Oh yes,—and type material for my husband—the eternal punishment for knowing the touch system! It was while working as typist that I first became interested in the diet of the vanished Apache. Most Indian history includes some reference to the delicacies that Mrs. Redskin served to her family. While I copied sections of mouldy books for my husband, I recorded on separate cards all facts about the Apache food and drink.

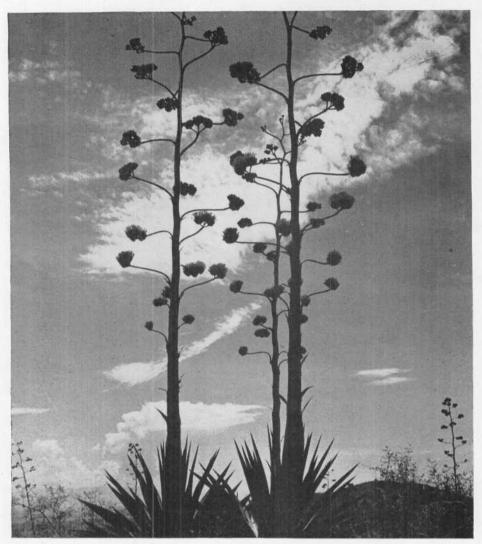
My accumulated information was perhaps not what Fanny Farmer would consider adequate for a young bride setting up housekeeping in a new wickiup, but nevertheless, in the course of time I knew what constituted a formal dinner among the Chiricahua and Mescalero Apaches, and how to mix an appropriate beverage to accompany it. So I decided to give a party and collect the refreshments from the backyard instead of the grocery store. The guests might not beg for my recipes but, at least, they would cease asking me what I did with my time.

I cherished the idea of sending up smoke signals by way of invitation to my feast, but I abandoned the picturesque in favor of the practical, and issued my invitations by post. Everyone accepted—and brought their own bicarbonate of soda, as an insulting gesture!

The Agave, more commonly known as the mescal or century plant, was utilized extensively by the Apache as a vegetal food. The Mescalero Apache's name even comes from this, their commonest source of nourishment. Equipped with a spade (not the utensil utilized by the Apache woman, who had a neat little gadget cut from an oak branch and flattened at one end) I attacked a sizeable century plant, just beginning to show its reddish flower stalk. In the best Apache tradition, I dug up the crown of the plant, chopped off the leaves with a civilized hatchet, and lugged home my loot, the white, bulbous crown, about two feet in circumference.

I dug a pit and lined it with rocks, and even made a cross on the largest rock in the center of the hole—part of the sacred rite of preparation. Although the real culinary artist among the Apaches would have arisen before the sun on the following day to light the fire in the pit, I started mine at the more comfortable hour of nine o'clock in the morning. It burned out about noon. I removed the ashes, lined the pit with bear grass, and put in the mescal crown.

I didn't have a cooperative tribe to assist me in the ceremonies which should accompany this process. At this point, the aboriginal cook puts a cross on the crown with tule or cattail pollen, with the cross directly east and west and north and south. The whole tribe then does a little praying to the Great Spirit and the youngest child in the crowd stands to the East of the pit and tosses in four rocks. Perhaps the lack of flavor that characterized my mescal cakes can be traced to this lapse in routine. I merely covered the crown with bear grass and then with the hot rocks, and finally a solid layer of earth so that no steam could escape. During the cooking process,



Agave or mescal plant in blossom. When these flower stalks first appear among the dagger-like blades of the plant they resemble a huge stem of asparagus. That is the stage when they are harvested and roasted in the mescal pit for food.

Apache superstition held that complete continence must be exercised by all members of the tribe—any failure would prevent the thorough roasting of the mescal.

About 35 hours later, I removed the soil and rocks. The appearance of the mescal at this climactic moment strikes terror at the heart of the hostess, for it is black and charred, but the pulpy center when removed bears a somewhat heartening resemblance to food. This center treasure I pounded vigorously on a smooth rock until it formed a thin sheet. This I laid on a clean piece of cloth to dry—not having a "mescal cradle," a very loosely woven shallow tray basket utilized for this purpose by Indian women.

When completely dry, the mescal cakes were stored away, awaiting their final flavoring on the festive day of my Apache party. Then I soaked them in water and kneaded into them ground piñon seeds, working the substance until its consistency was doughy and "inviting." This was the piece de resistance of any Apache banquet.

Mesquite trees are plentiful in the Southwest and the Apache utilized their

beans extensively in his culinary art, preparing them in a variety of ways. The raw beans were ground to flour on a metate, the seed coats removed by hand. Cooked beans were also pounded similarly to a thick consistency and the dough made into cakes. Another good old Apache custom was to cook the beans with meat and let the diners spit out the seed coats. This was the method of preparation I chose—because it seemed simpler and besides, provided entertainment for blasé guests who might find the spitting of shells diverting.

I gathered the mesquite beans, washed them, and poured them into a pot with the beef (cut up stew style) and water and a bit of flavoring, and let them cook until the meat was tender. This was the

hot dish of my dinner.

The opuntia, or prickly pear cactus, I gathered warily with thick gloves protecting my hands. The Apache child sent forth by his mamma on similar errand utilized wooden tongs for the purpose, made by doubling up a pliable branch. I tried this method but found it comparable to an amateur attack on Chinese food with chop sticks. I placed the opuntia in a sack and rolled it on the ground to assist in removing the spines. Then I took each fruit separately and finished the job with tweezers. There is no precedent for this method in the literature. The Apaches knocked off the spines with a brush of sacaton grass. The Indian frequently dried the opuntia but I served it fresh, having a more advanced point of view about vitamins.

My tea was made from cota. I might have chosen horsemint, sage, pennyroyal, lip fern or a fancy blend, since all of these were used extensively, but commonest of all teas was cota, fancied not only by the Apaches but by all Indian



The Baker adobe home—in the heart of the Dragoons "90 miles from the nearest neon sign."

tribes of the Southwest. I boiled the leaves in water and served the concoction with sugar and cream or lemon (as a reluctant concession to civilization).

And the beverage that accompanied the dinner—tulbai, the Chiricahuas and Mescaleros called it, from two Apache words, tu, "water," and bai from libai, meaning "grey." Tulbai is sometimes called tiswin, a modification no doubt of the Spanish-American name, tesvino. The Indians even sometimes called tulbai tiswin since many of the Apaches spoke Spanish as well as their native language.

Either wheat or corn may be used as the basic ingredient of *tulbai*, which may be consumed for pleasure—or for "medicinal purposes," if fussy. At least, the paternal Apache, given to imbibing, informed his offspring that *tulbai* is "good for you," it "cleans you out."

I chose corn, but the process I followed may be applied to wheat with similar results. The making of *tulbai* cannot be started when you see unexpected guests driving in your gate. It takes time. I



Dragoon mountains of Arizona. This range is in the heart of the old Apache country.

Sherman Baker assisted his wife in the preparation of the dinner by lining the mescal pit with rocks.

soaked shelled corn for 24 hours in water and then placed it in a narrow trench lined with damp grass, I covered the corn with more grass and with soil and put a blanket over the whole. Every day I reverently lifted the blanket and baptized the trench with water to facilitate the germination of the maize. Eventually when the corn had sprouted to about one and a half inches, I removed the plants from the ground. Although it

is completely unorthodox, according to best Apache prerogatives, my husband occasionally lent a hand in tending the *tulbai*. Preparation of this beverage was the Apache women's work. Consumption was the man's.

I then ground the sprouts with a metate. Then the corn material was boiled in water until about half the mixture had evaporated. More water was added and the mixture boiled again but only for a short time. Then I strained my nectar through cloth and allowed it to cool.

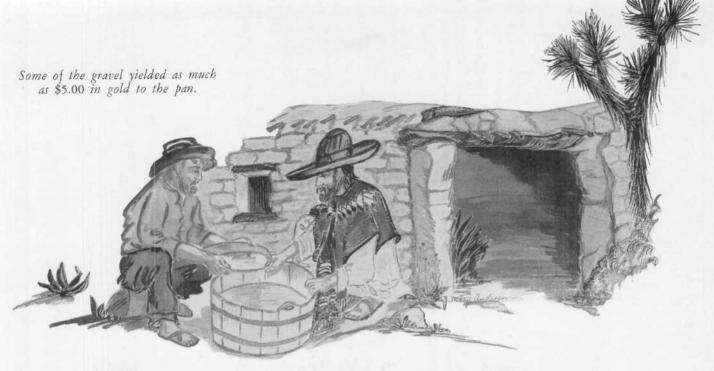
In 24 hours it had begun to ferment and was ready for consumption. I sweetened my beverage with sugar—the Apache sweetened his with mesquite flour or saguaro syrup, with similar results. Aging does not enhance *tulbai*. It must be used within a few hours, or it goes sour.

The guests arrived inappropriately in automobiles, instead of on mustangs. They wore shorts and slacks instead of blankets, but most of them had feathers in their hair! We served supper under our hackberry trees where we sentimentally allege that Chief Cochise once held a family picnic.

The *tulbai* put everyone in a pleasantly receptive mood for the Apache fare.

The mesquite beans and beef and the mescal cakes were served, with no nice regard for Apache etiquette, on paper plates, and the *cota* tea in hot drink cups. The opuntia was consumed hand to mouth, a la Apache procedure. There was much spitting out—but only of mesquite bean shells, I observed with some relief. Not enough scraps were left for even a modest hash for the morrow.

At the end of the party, which somehow managed to wind up with an unplanned war-dance around the fire, I sighed the self-satisfied sigh of the successful hostess.



Lost Arch Placer Diggings

Among the many lost mine stories current in the Southwest, one of the most persistent is the tale of the Lost Arch diggings. Most versions agree that this mysterious lost placer is located in the region of the Turtle or Old Woman mountains, in the southeastern part of the Mojave desert of California. Anyway, here is the story, and you may draw your own conclusions as to its authenticity.

By JOHN D. MITCHELL Illustration by Mary Anderson

HE Lost Arch placer diggings said to be located about 40 miles south of Goffs and 25 miles north of Rice, in or near the north end of the Turtle mountains, in eastern San Bernardino county, California, is another of the many mystery mines of the southwest. The now famous placer was first discovered by a small party of Mexican placer miners on their way across the mountains to the Colorado river placer diggings in the vicinity of La Paz. They camped one night on the wash to the east of the Old Woman mountains and somewhere near the north end of the Turtle range. There had been heavy rain and bunch grass grew along the edges of the wash and small pools of clear water stood on the shallow bed rock.

The following morning while out looking for the hobbled pack mules the attention of the miners was attracted to the large amount of hematite of iron scattered over the mesa and along the wash. The soil on the ridges and along the edges of the broad wash was red in color and from all appearances was good placer ground. A few pans of the dirt proved it to be rich in placer gold. Some of the samples yielded as much as \$5.00 worth of gold to the pan.

Members of the party carried placer machines for the purpose of establishing themselves at the mines at La Paz, so it was decided to stay and work the new find. Accordingly some of the men were sent down to La Paz for provisions while the others found a large pool of water that had collected from the recent rains and made adobes sufficient to construct a two room house. As was their custom the Mexicans built the two rooms separately and extended the roof over the open space between the two rooms. The entrance to this open space was through a large adobe arch which Mexicans call a San Juan.

The new-found diggings proved to be very rich and the Mexicans sluiced out \$30,000 worth of gold before the dry season dried up the waterholes. There was a small spring a few miles away, later known as Coffin springs, but it did not furnish enough water to carry on sluicing operations. In view of the scarcity of water it was decided to store the equipment and return the following season and continue their operations.

Reaching Los Angeles, the party split up, some going north to the Mother Lode country, and others returning to Mexico. No maps had been drawn of the placer field and later when separate members of the party sought to relocate the placer field they were unsuccessful.

In time the contents of the adobe house was carried away by Mojave Indians and the house itself fell down, all except the arch doorway. The arch was still standing as late as 1900, and was seen by the late Peter Kohler, who did not know of the existence of the rich placer diggings.

According to another version of the story the placer was named after a natural arch of earth or rock standing over the upper end of a deep gulch running down from the east side of the Turtle mountains. This is very unlikely as the terrain does not lend itself to the formation of that kind of a natural arch.

The adobe arch has now been leveled by erosion and the location can only be identified by some of the broken and rusted contents of the old adobe house that are still scattered over the desert near where it once stood. An old tub found there in later years caused the diggings to be known as the Lost Tub placer.

It was later discovered that the hematite scattered over the desert below the old house carried about \$100 a ton in gold and shows free gold when broken open. The red ironstained gravel on the ridges and along the wash is still rich in placer gold and will, no doubt, return a handsome profit.

Many expeditions have set out from Los Angeles and Yuma to search for the lost diggings. No doubt many of the searchers have seen this red mesa thickly strewn with boulders of hematite of iron, but have never associated them with the "Lost Arch" placer diggings.

Over a year ago John Hilton went out on a field trip to map a rose quartz field for Desert Magazine readers—and came home with a story about a tourmaline mine. He never found the guartz. John tried it again this fall—and actually located a large area where pebbles of quartz may be picked up as float. Here is the story of a mineral field where specimens may be found close to the paved highway.



Desert Steve and Philip Hilton examine some of the quartz specimens found in the field described in the accompanying story.

Those Pink Rocks Along Parker Road

By IOHN W. HILTON Photos by Harlow Jones

ELL, John, there are some pretty pink rocks out along the Parker road that might inter-

This was Jessie Brown's answer when I stopped at Rice, California, several years ago to inquire about semi-precious gem stones in that area. Mrs. Brown continued:

'I sent some of them to a jeweler in San Francisco once and he told me they were rose quartz, such as the Chinese use in carving. You might prospect the float and find the ledge. The jeweler said there was a market for big pieces with good color. But no one ever traced the float to its source. My prospector friends were always too busy looking for gold or silver.

All the old-time prospectors in the Southwest know Jessie Brown. For many years she was a sort of landmark in the old desert outpost of Blythe Junction, now

Critics can find much to condemn in the life of Mrs. Brown. But beneath the rough exterior there was a big heart. A true frontier woman, she suffered hardships and disappointments beyond the endurance of most women. She carried on a man's work, hauling water, packing burros, holding mining claims-labors that brought profit to every one except herself. I doubt if there are many among us who would have endured her trials-and yet retained the generous attitude toward the sick and discouraged and the down-andouter that was always a part of her nature.

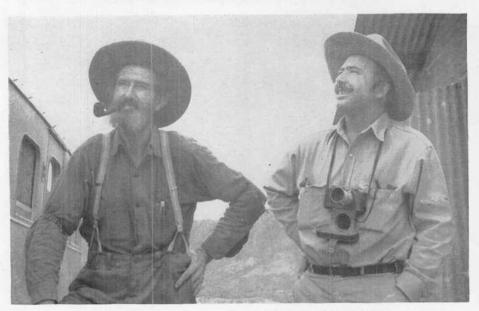
I first met Mrs. Brown in 1932. I had just opened my little gem shop on the desert. Money was scarce and I was spending all the time I could spare prospecting the desert in search of minerals for my stock. I had heard reports of agates and chalcedony in the Turtle mountains, so I cranked up my Model T and took the trail in that direction.

The road to Rice was merely a pair of wheel tracks through cacti and sand. A trip into this no man's land was an adventure, especially in midsummer in a flivver that had no top.

I had spent most of the afternoon digging out of the sand and refilling the radiator from a rapidly diminishing water supply. Finally the old car dropped into a sandy chuckhole and stopped. I tried all the hocus pocus I knew, but the flivver never budged. It was evident there was an internal ailment that required something more than a shovel and a strong back.

The hot sun was dropping low in the west and I could make out the buildings of Rice, distorted to many times their true proportions by the distant heat waves.

There was nothing to do but walk. I waited until the sun was down and then filled my canteen with the last water in my reserve drum, and started along the sandy road. The dry hot night, the long weary miles, and the silence broken only by crunch of my own feet in the sand, seemed never-ending. The memory of the coal oil lamp in the window of Mrs. Brown's cabin and her cheerful "hello" when I came to the door, still brings a warm glow to my heart. When I told her my story, my problem immediately became her problem. Her cook, she said, was



A couple of desert rats - Steve Ragsdale and John Hilton.

in the other shack, but she would call him. As soon as I had eaten a bite, we would take their truck and tow my car in.

Late that night we returned with the disabled auto, and confirmed the fact that some gears had been stripped. That meant ordering parts from San Bernardino. I think Mrs. Brown sensed the fact that I was mentally figuring the cost and trying to balance it against my meager cash supply, for she suddenly offered a suggestion.

"I have a couple of wrecked flivvers in the back yard," she said, "and I believe the rear ends are all right. You can have the parts from either of them if you are willing to tear them down."

It is needless to say her offer was accepted. And that is how I came to be the guest of Mrs. Brown for a couple of days, and learned the story of her life. She also told me about a number of mineral deposits which she thought might be of interest to a young fellow trying to make a living on the desert.

The rose quartz seemed to be fair specimen material, but I could never find the source from which it came. The float seems to be washing out from older sediments that may have originated in mountain ranges now leveled below the surface of the desert.

Recently Harlow Jones and I decided to return to the rose quartz field and see if it was of sufficient area to justify a field trip for Desert Magazine readers. Not many fields of this mineral are available where they can be obtained without trespassing on privately-owned claims.

We took the Box canyon route from Mecca. This road was washed out by cloudbursts in September, but has been rebuilt by the state road crew. The sky was overcast and by the time we reached Desert Center, rain was falling. We decided to have a chat with Steve Ragsdale while waiting for the shower to blow over. Stanley Ragsdale said his father was in his retreat writing and had given orders he was not to be disturbed. But such orders do not mean a thing among old neighbors on the desert.

Desert Steve not only was glad to see us, but was willing to put his work aside and go along on the rock hunt. We stayed for lunch which was served with characteristic Ragsdale hospitality. My son Philip, who accompanied us on the trip, was more than thrilled with Steve's yarns.

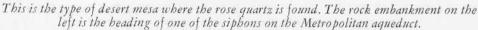
Then we took the long smooth aqueduct road toward Rice. As we rode along over the paved highway Steve told us stories about the days when that same trail was just two sandy ruts and he followed it with horses, tracking a couple of renegades he had been sent out to arrest.

Rice has passed through a boom since my first visit to the settlement. For many years this little frontier town was a law unto itself. It is near the Riverside-San Bernardino county line, and in the absence of a well-established boundary, neither county could establish jurisdiction in the courts. Gambling, bootlegging and all the vices of the old West flourished here. When law-breakers became too flagrant, the officers from Blythe or San Bernardino would go out and make arrests. But if the trial was held in Riverside county lawyers for the defendant would insist the town was in San Bernardino countyand vice versa. Under the circumstances, no jury would bring in a conviction. But a surveying crew eventually solved the problem, and Rice is now a respectable frontier town—in San Bernardino county.

We continued through Rice to Grommet, a section camp on the Santa Fe railroad that parallels the highway. We crossed the railroad tracks and then slowed down so I could observe the character of the float along the roadside. Soon we stopped the car and began to look around.

"Is this what you are looking for?" Steve called as he picked up a stone. I examined his specimen, and sure enough, it was a wind worn piece of pale rose quartz. Other samples were picked up and we found we were on the edge of a field where the quartz is scattered among the pebbles on the flat mesa. Farther down the road we came to an area where the desert is liberally sprinkled with specimens, not only of rose quartz but white and bluish pebbles of the same substance.

We found an occasional small piece







with a purple hue which placed it in the classification of massive amethyst. Scattered over the same area are white and carnelian colored chalcedony roses.

There has been much controversy over the subject of colored quartz—that is, the source of the color. And since the experts have not yet agreed on a definite theory, I

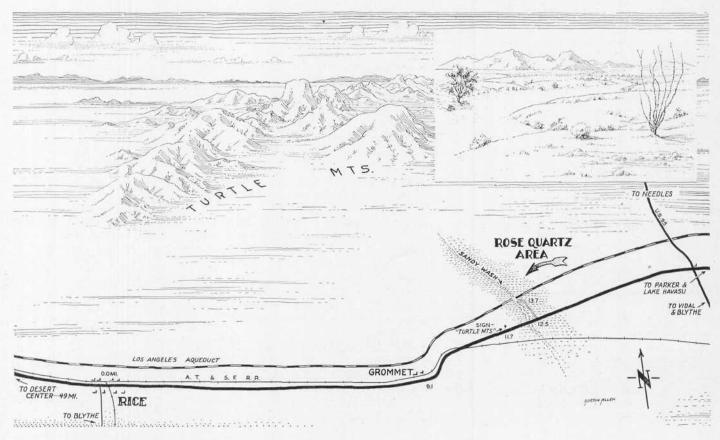
Members of the Hilton party picked a rainy day for their field trip—and did their collecting between showers.

am not going to stick my neck out by attempting to settle the question.

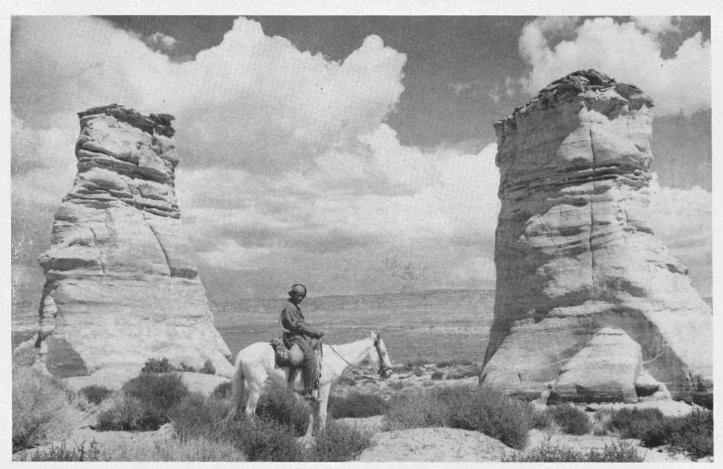
It was for a long time considered probable that the color was due to traces of manganese or titanium. More recently,

spectro-analysis has disclosed that dark specimens of amethyst contained no trace of manganese, or any other element to which the color might be traced.

The old theory that these colors might be of organic origin, since they have a tendency to fade in sunlight, seems even less plausible. The heat at which they were



Who can identify this Arizona Landmark?



formed, and the lack of carbon lines in their spectrum eliminates that suggestion.

Just before Europe went haywire, a very learned paper was published by the institute of gemological research at Idar, Germany, disclosing the results of extensive experiments which seemed to offer a plausible explanation for the coloring in smoky citrine, rose and amethyst quartz. It is a highly technical subject, however, and not easily presented in terms for the lay reader. I understand, however, that the German chemists actually were making amethyst from smoky quartz by the use of cathode or X-rays.

It is common knowledge that the coloring in smoky quartz can be eliminated by a baking process without loss of weight, thus disproving the theory of organic coloring.

Of course I am discussing the crystalline and massive quartz types, and what I have said has no bearing on the agate, chalcedony and jasper types of cryptocrystalline quartz. These latter get their colors from an almost unlimited variety of inclusions of foreign matter between the tiny separate crystals. That is why an agate can be colored with dye, but a true crystal cannot. Any change in the color of crystalline quartz must be from the inside out, and change the atomic structure of some of the molecules.

Prize Contest Announcement

Somewhere in northern Arizona in a region not too well known to the traveling public, are these two unusual rock formations.

Readers of Desert Magazine will be interested in knowing more about these landmarks and the interesting area in which they are located. In order that complete data may be available for publication, this Magazine will give a cash award of \$5.00 to the person sending in the best descriptive story of not over 500 words. Exact location should be given, accessibility to highways, and as much geological information as possible.

Entries must reach the magazine office by February 20, and the winning story will be published in the April number of Desert.

Realizing that a field so accessible is sure to attract a large number of rock collectors, we spent some time checking the extent of the deposit on the north side of the aqueduct. The big ditch is an impassable barrier except at points where siphons have been installed for storm drain purposes. Steve Ragsdale, with the skill of a veteran desert traveler, drove his car over one of these siphon gaps in the canal and some distance up the sandy wash. On the flats on both sides of the arroyo we could see there was abundant material—enough to withstand the invasion of a good-sized army of rockhounds.

I would like to suggest to the hardier collectors who are capable of long hikes that they refrain from collecting near the highway. They will get better material by walking some distance toward the Turtle mountains on the north, and they will be rendering a generous service to less fortunate members of the collecting fraternity who lack the physical stamina for extended exploration. If this suggestion is followed there will be plenty of material for both types of collectors for months and perhaps years in the future.

There are few roads in the Turtle mountain area — it is still comparatively unknown except to the prospectors who have followed its arroyos and ridges in quest of precious metal. Entirely aside from the "pretty pink rocks" to be found here, it is a field that offers rare fascination for those who like to explore a desert region undisturbed by the hand of man.

To a Cactus Blossom

By Doris C. Priestley Pomona, California

I found you blooming in your desert world, A lovely thing, spread for my eyes' delight! Your face inviting every amorous bee! Your thorns a warning of marauder's plight!

The bees you woo will leave you desolate, Your flower will fade, the breeze your petals

Be not afraid! In memory your grace Will live! Beloved emblem of the desert spring!

DESERT SONGS

By Elsie Huskison Phoenix, Arizona

There's a tang in the wind o'er the desert Like the breath of a western sea, A joy in its far flung spaces Unchanged, from antiquity.

There's a call from its flagrant beauty Challenging day and night, When the moon in silent glory O'er the rim of the world peeps in sight.

There's quiet and peace in its silence Healing for body and mind, No echo of strife and parlance Only solace, gentle and kind.

There's contentment beyond believing
In a shack in the mesquite shade,
Surcease from life's sorrow and grieving
From the sham and the false parade.

There's beauty in hidden places
For those who have eyes to see,
And a tang in the wind o'er the desert
Where shifting sands sing to me.

ROOTED

By OLIVE McHugh Salt Lake City, Utah

Cool brisk winds of the burnished desert night Beat my skirts entreating me to fly Over dunes to pinnacles of light Floating in the moon's full flood, but I

Stand like a Joshua tree — stiff and grey, Assailed by drought and heat, by frost and sand,

Butt of daring winds' relentless play, Holding securely to the nutrient land.

Love resists the call of distant height No lure can part it from sustaining worth: Though cool compelling breezes tug with might

I stand, a Joshua rooted to my earth.

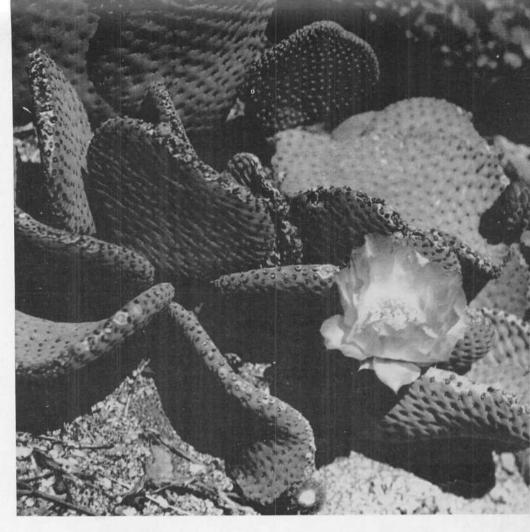
"Rooted" was awarded second prize in the annual poetry contest of the Utah Writers' Roundup at Ogden this year.

DESERT NIGHT

By Jean McElrath Wells, Nevada

At dusk when all the mountain heights In misty blue aloofness stand,
The wind to some far place withdraws
And I am left in this vast land
Alone and lost and cold and small.
'Till God sends out one of his Saints
To light the candles in the sky,
And with the moon and stars he paints
The realm in velvet shades of night.

Then — sheltered, warm and safe I feel Within the shadow of these peaks, And loneliness becomes less real With soft wind fingers 'gainst my cheeks.



LAST REQUEST

By The Old Homesteader Anza, California

The desert sun was sinking fast
Below the cloudless sky.
I found him ere he breathed his last,
The waterhole was dry—

His canteen lay—an empty pawn— The burro's drooping head, Gave evidence that ere the dawn It also would be dead.

An old Prospector, worn and grey, Beside a stunted tree; But as he passed the unseen way A tale was told to me.

In halting whispers, faint and grim, He breathed his daughter's name, And looking toward the desert's rim, Aroused the dying flame.

"It's all! in . . . there! the burro's pack . . . Ten years of toil . . . in dust!
Tell her'—his dimming eyes rolled back;
"To you! . . . a sacred trust—"

I searched the pack. Now, waters flow— The daughter got her gold; And well-kept fragrant flowers blow Where "Daddy's" tale was told.

CREED OF THE DESERT

By June Le Mert Paxton Yucca Valley, California

The tumble-weeds are nomads, And gaily do they roam; Anywhere they care to stop To them is home, sweet home.

SONG OF THE DESERT

By James MacDermott Sheridan Hollywood, California

I am not dead, but waiting:
Behold, where the hot wind rides,
The beds of my vanished rivers,
The shores of my ancient tides.

I am not dead, but dreaming: Within my burning breast The ghosts of stately forests And smiling landscapes rest.

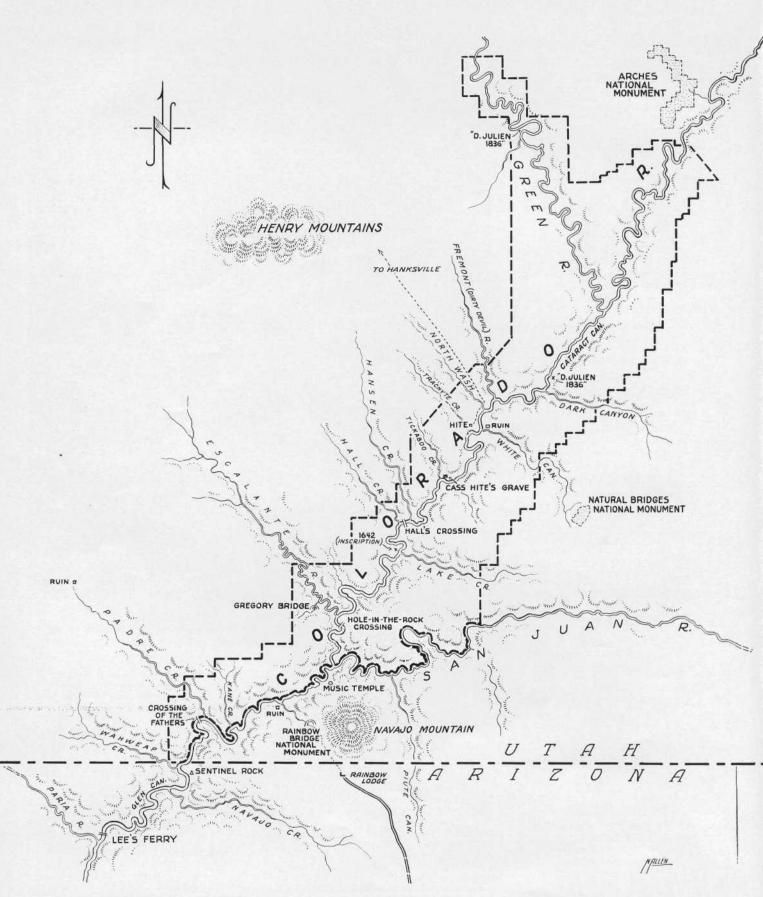
Waiting, dreaming, yearning
For the days that used to be,
When the hunter roamed my forest
And the fisherman sailed my sea.

DESERT RAIN

By Eva Carpenter Iversen Valley Center, California

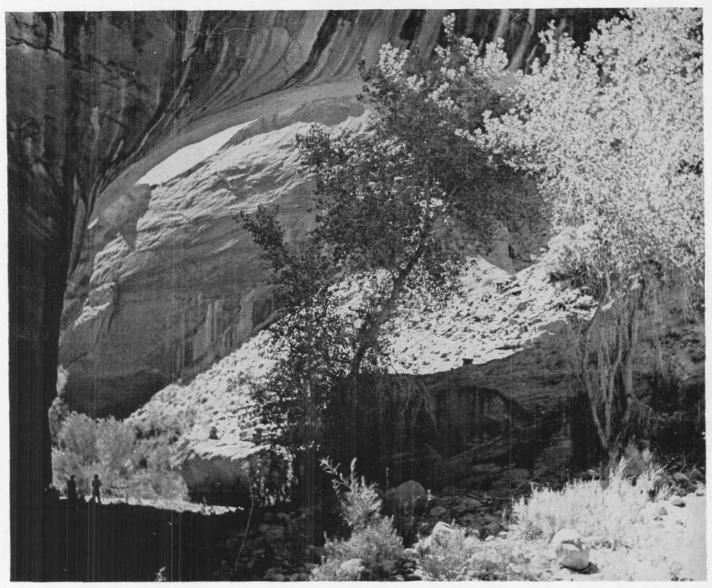
Tahquitz was angry last night
For into my darkened rooms
Came the flash of his flaming sword—
The roar of his thunder booms.
The black cloud that rimmed the south
Was slashed by lightning flares—
Was shattered — and cleansing rain
Poured through a million tears.

The mountain and desert land
Was freed of dust and grime
And jewels lay on the sage—
A sparkling gift sublime.
Suddenly, the tempest passed.
Tahquitz* power was stilled.
But we who dwell in the desert
Give thanks for the water he spilled.
*Tahquitz, the god of the Cahuilla Indians who dwell in the regions around
Mt. San Jacinto.



This map, made by Norton Allen from data supplied by the U. S. department of interior, shows the tentative boundaries of the proposed new Escalante National Monument in southern Utah. The monument outlines are shown by the heavy broken line. According to federal authorities the park area as finally determined will not be any larger than shown here, but may have some-

what less irregular boundaries. It was in one of the canyons of this proposed new national reserve that Everett Ruess mysteriously disappeared in 1934. It is probably the most rugged and least explored wilderness area in the West, and according to Charles Kelly, who wrote the accompaning story, "contains more natural attractions than any other equal area in the United States."



This is Gregory natural bridge, discovered in a tributary of Escalante creek by members of the Nevills river party last summer. Photograph was furnished by C. W. Larabee of Kansas City, member of the discovery party and the only photographer who has so far had the privilege of filming this natural wonder.

Proposed Escalante National Monument

By CHARLES KELLY

ISCOVERY last summer of a new and spectacular natural bridge nearly as high as the Rainbow Arch, in a side canyon near the Colorado river, focuses attention on a comparatively unexplored section of the West which may soon be made accessible to desert travelers.

The area includes Green river, from Greenriver, Utah, to its junction with the Colorado, and the magnificent canyon of the Colorado from Moab, Utah, nearly to Lee's Ferry, Arizona. In the opinion of this writer this section contains more natural attractions than any other equal area in the West.

It is now proposed by Secretary of the Interior Harold L. Ickes, to set aside this section either as a national monument or a recreational area. Regulations governing water, mineral and grazing rights are now being discussed with Utah state officials, and as soon as an agreement is reached it is expected that the area will be set aside by presidential proclamation.

The proposed national monument runs in a northeasterly

direction from Utah's southern boundary for a distance of approximately 350 miles (by river). Between its northern extremities at Greenriver and Moab, and its termination near Lee's Ferry, no highway crosses the river, and only one trail, extremely difficult for auto travel, reaches the banks of the Colorado at Hite. This trail was first pioneered in an automobile by Dr. A. L. Inglesby, of Salt Lake City, in 1933. About the same time Charles Gerheart took a car down White canyon from the natural bridges east of the river. These two trails some day will be connected by a bridge or ferry near Hite, and the road, which already has been surveyed, will open up a magnificent new section of desert, river and canyon heretofore inaccessible to the public. Desert Magazine presents herewith the first published description of this proposed new national monument.

Greenriver and Moab to the Junction—From the town of Greenriver on the Green, and from Moab on the Colorado

to the junction of the two streams, both rivers run through deep and picturesque red sandstone canyons, but the fall is slight and the current smooth enough so that motor boats sometimes make the trip down one stream and up the other. Cliff dwellings built in the canyon walls are found on both streams. Near Horseshoe Bend on Green river is the inscription "D. Julien, 1836," cut by Denis Julien, one of Antoine Robidoux's trappers.

Junction— According to all river voyagers, the view from the top of the cliffs above the junction is more spectacular than any other spot north of Grand Canyon. Just below the junction are found the names of most of those who have passed down the river.

Cataract Canyon —Here the river runs through a narrow limestone canyon, choked with boulders, containing the worst rapids on the Colorado. It extends from the junction almost to the mouth of Fremont river. Many boatmen have lost their lives in these boiling waters, probably including Denis Julien, who left another inscription in lower Cataract canyon.

Fremont River—Called "Dirty Devil" by Major Powell's expedition of 1869. Here, two years later, Powell cached one of his boats.

North Wash—Here a barely passable automobile trail comes in from Hanksville, 60 miles west, and continues six miles downstream to Hite.

Hite—Known also as Dandy Crossing. Cass Hite, prospector and hermit, located here in 1883. His original cabin still stands. Here also is the little ranch of Mr. and Mrs. Arthur Chaffin, who started from scratch in this desolate country five years ago. They now have a comfortable home, green fields and a bearing orchard, proving what can be done by two people who are not afraid of hard work.

White Canyon— Enters the Colorado from the east (Natural Bridges National Monument) nearly opposite Hite. Remains of a three-story Indian tower stand prominently above the river, and the ledges near the canyon's mouth are honeycombed with cliff dwellings. There is an interesting group of petroglyphs just south of the tower. A short distance below is the cabin and placer claim of Charles Gerheart, who with the Chaffins, constitute the entire permanent population of the Escalante monument area.

Tickaboo Creek—On this little stream are the ruins of another cabin, a half-dead orchard, and the grave of Cass Hite, who died here in 1912.

Hansen Creek—A fine group of pictographs in colors and petroglyphs near the mouth of the canyon. A pueblo ruin on top of the cliffs. Just below are the remains of Robert B. Stanton's quarter-million-dollar gold dredge, packed to the river in pieces in 1898.

Hall's Creek—Just above is Hall's Crossing, used by Mormon pioneers.

Lake Creek—Opposite the mouth of this stream, on a low ledge are carved the figures "1641," believed to have been left by some unknown Spanish expedition from Santa Fe, and if genuine, the earliest Spanish inscription in Utah.

Escalante River—In a side canyon not far from the mouth of the Escalante, is the Gregory Natural Bridge, discovered in the summer of 1940 by Norman Nevills and party.

Hole-in-the-Rock Crossing—Here, in 1879, Mormon pioneers on their way to settle Bluff, Utah, cut a huge staircase down through a narrow crevice in the canyon wall and after unbelievable effort got their wagons down and crossed the river.

Music Temple—A beautiful grotto two miles below the San Juan's mouth, where members of Major Powell's party cut their names. Most of them are still readable.

Aztec Canyon—Three unexplained prehistoric structures

at the mouth of this canyon, which leads (six miles of good trail) to the incomparable Rainbow Arch.

Padre Creek— About a mile below Kane creek. Here Fathers Escalante and Dominguez made the first recorded crossing of the Colorado on November 7, 1776. In the upper reaches of this canyon is an unexplored cliff dweller city.

Twenty miles below Padre creek is Sentinel Rock, and 40 miles below is old Lee's Ferry, both south of the contemplated boundaries of the Escalante monument.

The southern half of the Colorado river contained within the Escalante monument is known as Glen canyon, so named by Major Powell because of the comparative tranquillity of its waters after the fierce rapids in Cataract canyon. Its walls of red sandstone extend almost sheer from the river to a height of from 600 to 1600 feet, broken only occasionally by small tributary streams or dry canyons. Each bend brings new and startling vistas, the dream of every color photographer. The river's tranquillity is occasionally broken by what river men call riffles, usually free of rocks and comparatively safe for small boats; but there are many miles of quiet water, and a boat trip through Glen canyon, drifting with the five-mile current amid the magnificent changing panorama of the canyon, is an experience never to be forgotten. Driftwood furnishes plenty of fuel and there are hundreds of comfortable campsites.

Included within the borders of the proposed monument east of the river is some of the country described in Desert Magazine's recent story of Al Scorup. Just outside the western boundary are the seven main peaks of the little known Henry mountains. To the south are the Smoking mountains, still sulphurous from subterranean fires and known to only a few. The entire area is dotted with cliff dwellings, few of which have ever been photographed.

Even after roads have been built into this magnificent section, it will be generations before its hidden recesses have been

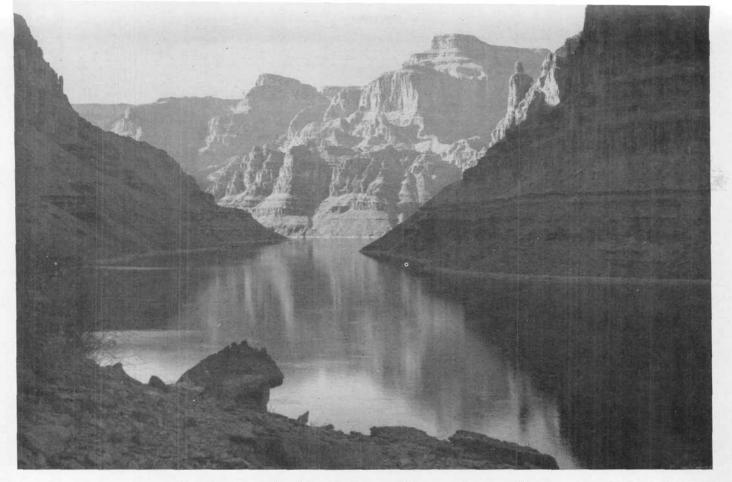
fully explored—and therein lies its fascination.

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- Kingman, Mohave County, is conveniently reached by rail, stage or by U. S. Highways 93, 466 and transcontinental highway 66.

KINGMAN

ARIZONA



In the Hall of the Mountain King

By ALFRED SCHMITZ 4705 Virginia Avenue Oakland, California

The "king" stands just to the right of center. This picture was taken where the Colorado river enters Lake Mead 35 miles upstream from Pierce ferry. Equipment: 9x12 Voightlander, 15 cm Heliar lens at f22, 1/5 second with yellow filter at four p.m. This picture won first prize in the Desert Magazine's December contest for amateur photographers.



Rockhound, Junior

By LEONARD RICHARDSON Route 1, Box 446 Escondido, California

Winner of second prize in the Desert Magazine's December contest. Taken with an Argus model C2, 1/50 second at f18 on medium pan film, yellow filter.

Special Merit

In addition to the prize winners in the December contest, the following entries were rated by the judges as

having more than usual merit:
"Skyline" (Saguaro cactus) by Roy
Miller, Los Angeles, California.
"Old-timer" by G. M. Relyea, Salt

Lake City, Utah.

"Mud Bubble" by Arthur Buckwalter, Pasadena, California.



Clear atmosphere makes cloud photography especially easy on the desert. If clouds are light and fleecy a red filter will darken the patches of blue sky and strengthen the contrasts. This is a stormy sunset taken over Jawbone canyon in the Mojave.

gazed sadly at my handiwork—as dismal a collection of prints as any amateur photographer ever shot on his first day out. Some were too dark, others too light, and all of them flat and indistinct.

Just a couple of days before, I had returned from a delightful desert trip in the Twentynine Palms area. It was spring, flowers were everywhere, and great billowy clouds paraded across the sky. Conditions for picture-taking were perfect and I snapped my shutter enthusiastically at every pretty view.

Did my prints look like what I saw? For from

Did my prints look like what I saw? Far from it! Gone were the billowy white clouds, only

smudgy sky greeted me. The flowers looked like roadside weeds. Every picture had a woebegone aspect.

I couldn't blame the photofinisher because I knew he did excellent work. My camera was one of the best and had a fine lens, so it couldn't be that. There could be only one other conclusion, the trouble must be with myself.

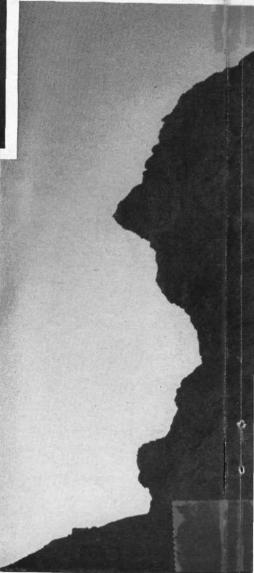
Gradually, it dawned on me that clicking snapshots is one thing—and taking sharp clear well composed photographs with proper lighting, is something else. So I began to study the art

Once in a great while the photographer will have an opportunity to film a desert tortoise in his native haunts.

If the pictures you snapped on y disappointing, the chances are ten photographer and not the camera. proper timing, wrong lighting no composition, or any one of a dozen all be corrected with a little study given by an amateur who bough ago—and now supplies some of thing in the Desert Magazine.

Good Picte Sure, you can

By DICK FRI Photographs by

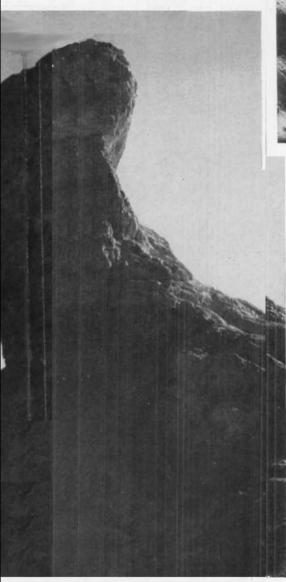


Keep the camera close to the ground in sk was used in this case because the rock was contrast. On the other hand, if there had bee have been darkened i

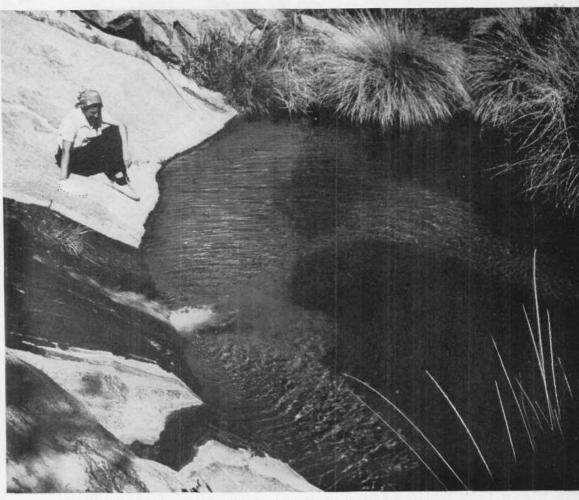
ed on your last trip to the desert were are ten to one it was the fault of the camera. It may have been due to inting, no thought to background and a dozen errors or oversights. They can be study. Here are some suggestions, be bought his first camera three years are of the finest photographs appear-

ctures?

DICK FREEMAN graphs by the author



round in shooting this type of picture. No filter he rock was dark and a light sky was needed for here had been sunlight on the rock, the sky should darkened with a red filter.



Note the shadow of a giant reptile's head on the water. It is one of those odd freaks discovered after the picture has been taken and printed. This photograph was taken at one of the pools in Eagle canyon near Palm Springs.

of photography. One of the first things I learned was that the average amateur's landscape or outdoor shot suffers from lack of framing. Quite often a tree, bush, rock, post or some other object located at the side of the picture will assist in leading the eye into the scene.

One day several months ago Dr. Marko J.

Petinak and myself were hiking in the hills overlooking the Salton sea. Doc was about 50 feet in front of me when I heard him call out, "Dick, I think there's a good shot here." I found him looking through a beautiful natural rock arch. In the distance the Salton sea shimmered in the late afternoon sunlight. A perfect silhouette shot if ever there was one. "All right Doc," I said, "just sit on that rock and we'll sée what can be done." Dr. Petinak is an excellent hiker, an avid rock hound, and a first rate camera fan himself. From a point 15 feet behind the arch I snapped

When it is necessary to elevate the camera Dick Freeman mounts his camera on the top of his car. Photo by Catherine Sargent. the shutter. The result was a striking picture framed in a natural rock arch. Incidentally, this is the story of the picture on the cover of this issue of the Desert Magazine.

I want to emphasize what nearly every camera owner already knows — that outdoor pictures should be taken in the early morning hours



before nine or 10 in the morning, or in the late afternoon from three o'clock until nearly sunset. The reason for this is obvious. Long shadows give greater depth and therefore more interest and clarity to the picture. From 10 a.m. to three p.m. we have much light and few shadows, resulting in pictures that are flat and uninteresting. This rule of course applies to black and white exposures only and not to color.

And now about those "wishy washy" skies. What can we do to bring out those big silvery clouds, without which many outdoor shots are failures? Now when I mention the word "filter" don't conclude that I am writing a technical treatise for experts. A filter is nothing more nor less than a little lens of colored glass placed in front of the camera eye to give a more natural rendition to the scene before us. It is easy to use. Nine times in ten all you need for outdoor work is a medium yellow filter. For example, suppose you are making an exposure at 1/50 of a second with the lens stopped down to f16. In order to use the medium yellow filter satisfactorily with most films, you would double the exposure, timing the picture at 1/25 second instead of 1/50. Then those fleecy white clouds will be right there looking at you when the prints are made.

One day I was admiring the cloud effects in a picture a friend had taken. I inquired if she had used a cloud filter in making the exposure. She hesitated a moment and then replied, "Well yes and no, you see I have some amber sun glasses

of a fairly good grade optical glass. When I want to record the clouds I just hold one of the eye glasses in front of the lens." That one had me stopped. I have never tried sun glasses that way myself, but it certainly seemed to work.

Occasionally on the flat lowlands of the desert I find a high camera angle necessary in order to secure a good picture. It is a simple matter to roll a car window down and stand on the window ledge. The camera may then be set on the top of the car. A tripod, by the way, is handy when doing this. A camera rest is necessary if the exposure is slower than 1/25 of a second. Some photographers will not attempt to take exposures with the camera held in their hands at a timing slower than 1/50 second.

Interesting animal pictures are often obtainable on the desert. One weekend while on a trip into the Rainbow canyon area we came across a couple of desert tortoises ambling leisurely down the road. A collie dog in the party was very curious. He was also smart and had no intention of getting his nose nipped. Consequently a fast film and a shutter speed of from 1/100 to 1/200 seconds was necessary to record his antics without blur, as he pranced rapidly around the tortoises investigating them from first one angle and then another.

An old desert road may often be used to advantage in your pictures. Try to locate your camera so the road enters from the bottom or near the lower corner of the scene and leads into the picture and not out of it. Thus the eye will follow the road to the center of the scene.

Some photographers pose people in their landscape shots and others do not. It is entirely a matter of personal preference. For myself I think the inclusion of a human figure in a scenic view helps the composition if the person is 50 feet or more away from the camera and is looking into the picture, not at the camera. If the individual is much closer than this the picture often resolves itself into an informal portrait of that person, and usually it is neither a good landscape nor a good portrait.

Interesting shots of friends may often be taken with palms, springs or pools as props or back ground. Take a spring surrounded by palms for example. Have the friend turned toward the camera examining a reflection in the water or busy doing something. This takes away that selfconscious expression and will usually result in a good picture.

Other than a camera equipped with a good lens, an exposure meter is probably the best investment one may make in camera equipment. Frequently the light encountered on the desert is exceptionally strong and it then becomes easy to overexpose. It is difficult to obtain a fine print from a heavily over-exposed negative, as a good deal of the detail is often lost. A good exposure meter will assist greatly in securing negatives of the proper density.

One of the most interesting plants to photograph is the yucca. When in bloom its tall white blossoms stand out against a deep blue desert sky. Attempting to catch its full beauty photographically, I usually choose a low angle camera location, not over one or two feet above the ground as a rule. A filter is necessary to darken the sky, thus showing the white flowers to the fullest advantage. A few clouds are always a help, but I try to place the camera so that none of the clouds are directly behind the blossoms. A yucca photographed in this manner is one that your friends will always admire.

Desert pools have always intrigued me. When photographed in the right light and with the proper framing, they make a most interesting picture. Recently while hiking with a friend up Eagle canyon near Palm Springs, a sparkling pool came into view just a few hundred feet down the stream from 'Nellie Coffman's maidenhair ferns,' described in the Desert Magazine in January, 1940.

Circling the pool slowly I reached a spot where a dark shadow on the water took the form of a reptilian head drinking from the little stream that flowed into it. The mouth, nose, slightly protruding forehead, even a big black eye were readily apparent. In one spot the marine growths on the bottom of the pool looked through

\$25 Offered for Cover Pictures

In order to secure a series of outstanding cover pictures for future issues of the Desert Magazine, the publishers are offering \$25.00 in cash prizes for the best photographs submitted before March 1, 1941. The money will be divided \$15.00 to first and \$10.00 to second place winners.

The contest is limited to desert pictures, but may include a wide range of subjects, preferably close-ups, of wildflowers, animals, cacti and other shrubs, reptiles, Indians, in fact any subject that belongs essentially to the desert. Entrants will find it helpful to study the covers on previous issues of the Desert Magazine. Following are the requirements:

1—Contest is open to both amateur and professional photographers, with no restriction as to residence.

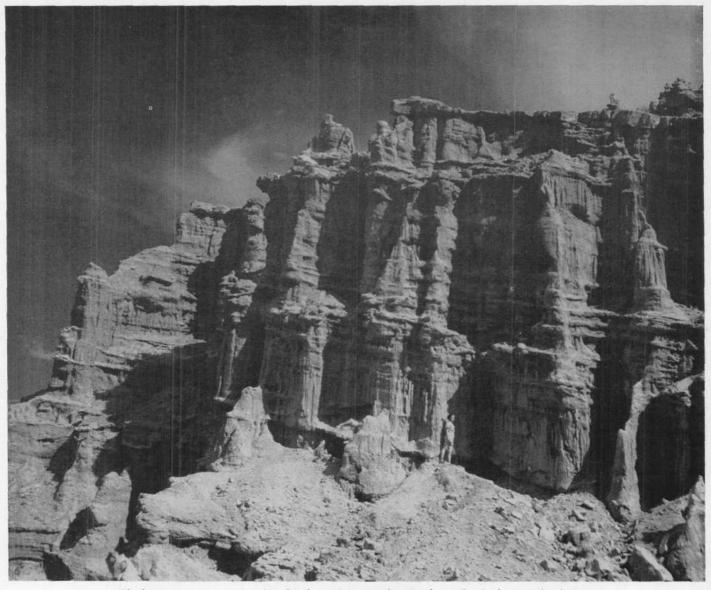
2—Prints should be approximately 9x12 inches, glossy black and white, unmounted, with strong contrast. We prefer pictures so composed that the Desert Magazine masthead lettering may be imposed on the photograph without trespossing on the main subject. Neutral shades should be avoided as far as possible in the upper three inches of the picture. We prefer dark shades at the top on which we can impose lettering in light-colored inks, or light background on which we can print dark inks, to secure the needed contrasts. We are seeking pictures only—do not send in prints carrying printing or lettering of any kind.

3-There is no limit as to the number

of pictures submitted by a contestant. Prints must reach the Desert Magazine office by March 1, 1941.

4—Judges will be selected from the editorial staff of the magazine, and winners will be announced and prize checks sent out within 10 days. The Desert Magazine reserves the right to buy non-winning pictures submitted in the contest at \$3.00 each. Non-winning pictures will be returned only if postage accompanies the entry.

This contest is independent of our regular monthly photographic competition for amateurs. In order that entries in the cover contest may not be confused with pictures in the regular monthly contest, they should be clearly marked: COVER CONTEST, DESERT MAGAZINE, EL CENTRO, CALIFORNIA.



Shadows are necessary to give depth to pictures taken in the rocks. Inclusion of a human figure helps show comparative size. A medium yellow filter darkens the sky and strengthens the contrasts. This picture taken in Red Rock canyon, California.

the clear cool water like a big black bear. The whole thing photographed perfectly. I mention this only to show the startling photographic possibilities of the desert, no matter where we go.

When photographing spectacular cliffs or canyon walls, a few simple rules will assist greatly in obtaining good pictures. Let us take for example the famous Red Rock canyon in the Mojave desert. It is one of the most popular photographic subjects in Southern California. It is nearly always possible to find shadows in these highly eroded cliffs. Shadows are necessary to bring out the detail of the rocks. Another thing, don't tip your camera up. Keep it level, even if you have to back up some distance to get the entire cliff in the picture. If you point the camera up, the cliff in the picture will appear to be falling over backward, a very unnatural appearance and not at all pleasing to look at. A human figure near the bottom of the cliff gives an excellent comparison as to size. And finally, a filter to darken the sky and bring out the clouds (if there are any) is a good idea.

One good example of when not to use a filter is in photographing some odd rock formation or tree which you wish to silhouette against the sky. Let us consider the well known Agua Caliente springs silhouette, which is located on the old Butterfield stage route. This peculiar rock, when photographed from a low camera angle, looks much like the profile of some stout old lady. By not using a filter the lightened sky helps make the contrast between the rock and the sky more vivid. Thus interest in the picture is heightened.

I want to emphasize the importance of backgrounds. Amateur photographers often are too intent on their subject to think about the objects beyond. Secure all the contrast you can. Shoot light subjects against shadows if possible, dark subjects against sky or light colored rock, or sunlit landscapes. Also study the character of

the background. Don't picture an Indian in native costume against a board fence, or a lovely landscape with telephone wires across the sky. Before you snap the shutter, look beyond your subject and note the lighting and background.

High winds on the desert will often produce strange and oddly shaped clouds. Special effects in cloud formations may then be easily taken if one is on guard to catch them at just the right moment. At times tremendous masses of clouds will be tumbling around one of the peaks. Suddenly a portion of the mass will tear itself loose and go chasing off across the desert. Then is the time to shoot.

Finally, I might add that most desert and landscape pictures are best if taken at a small aperture, say f16 or f22 or even smaller if your camera has it. This small aperture assists greatly in giving your pictures clarity and added depth of field. Next time you go prospecting for desert pictures try some of the foregoing ideas and see if your shots don't improve.

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BRAWLEY

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Sez Hard Rock Shorty of Death Valley . . . By LON GARRISON

Hard Rock leaned back in his chair and looked out across the dry sandy flats to the hills shimmering in the blue haze.

"Kind o' reminds me," he mumbled, "of a poem I read once—bout a feller named Magee—Sam Magee from Tennessee. Sam went up to Alaska an' then spent his time wonderin' why he done it. Same with me—only I don't wonder why I done it' an' this aint Alaska. I left home about a quarter of a jump ahead of the constabule — I been here 50 year, an' I stay because I like it. But some days I get to thinkin' about when I was a kid, an' just today I run acrosst a news item reminded me o' somethin."

"It was about fishin'. Some guys down near San Diego's been spendin' years tryin' to catch a big trout in a crick down there—named 'im Vergil on account of he was so smart, an' ever' year a gang of 'em'd meet an' plan what they'd try on 'im this time. But this year when the Vergil club showed up to start action they found a neighbor kid weighin' Vergil up on the coal man's scales. Poor kid didn't know yuh wasn't supposed to catch Vergil — just pertend, so he slipped 'im a gob o' worms on a number four hook.

"Reminded me o' fishin' when I was a kid — back where they was cricks with water in 'em an' willers to snag your line in. There was a big mud cat named Bud lived in a little pool just back o' the mill an' seemed like the longer he lived the smarter Old Bud got. No worms for him not if they had a hook in 'em. No corn meal mush - no mice - no nuthin' anybody c'd find out about an' we tried ever'thin'. Fellers up town took up a collection an' put up a prize for Bud. Some guys'd set up all night fishin' an' in the mornin' they'd move away an' leave room for those that'd spend the day. But no Bud.

"I got 'im though. Was out there swimmin' one day when a wagon load o' stuff from the paper factory turned over off the bridge an' lit in the crick. First thing I knowed the crick was dry an' Bud an' me was floppin' in the mud. I just walked out an' picked 'im up. Found out later that load was blottin' paper."

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HERE AND THERE

on the Desert

ARIZONA

Phoenix . . .

Women are stepping to the front in Arizona politics. Thirty-four feminine candidates took over duties of elective offices of the state in January. First woman ever to fill the major post of state auditor is Anna Frohmiller. In Globe, Marguerite Harding is the only woman to hold the job of county assesof the peace in Chandler. Eight of the State's 14 counties are proud of women serving as recorders. Seven counties picked women for school superintendents. Maricopa sent women to represent the county in the legislature and Mrs. Nellie T. Bush, pioneer in the political arena, returns from Yuma county to the legislative halls.

Ganado . . .

Sulfanilamide is the miracle drug restoring eyesight to Indians suffering from trachoma, a dreaded disease historians say Coronado and his men probably brought to New Mexico four hundred years ago. A virus disease, trachoma granulates and scars the eyelids, eventually clouds the cornea, causes blindness. Indian service estimates there are 25,030 cases, among them 8,325 in Arizona, 4,239 in New Mexico, 429 in Nevada, 472 in California. Internal doses of the drug are said to halt symptoms in three days, arrest progress of the disease within two weeks. At reservation clinics, tribesmen are receiving the new treatment.

Benson . . .

After 44 years Benson changes postmasters. Leonard D. Redfield, in charge of the



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office since 1896, has retired at the age of 70. William D. Spangler, 24, is his successor. Redfield's father was postmaster at Reddington 60 years ago. Leonard as a boy of 12 rode the pony express carrying mail between Riversdale, near Winkelman and Tres Ala-mos, 100 miles down the San Pedro river. Even then he wanted to be a postmaster like his father. He moved to Benson-only there wasn't any Benson here then-and as soon as there was a community, he became its first postmaster. Appointed by President Cleveland he was reappointed by every succeeding president, Republican or Democrat.

Flagstaff . . .

Establishment of archery hunting reserves in Arizona has been recommended to the state game commission by the Flagstaff game protective association. It is urged that reserves in which all rifle shooting is banned are necessary for the safety of archers and to avoid having game startled by rifle fire. K. C. Kartchner, state game warden told the local association that a supervised antelope hunt in which 75 old antelope will be killed, will be held next September or October.

Window Rock . . .

When packages of cigarettes came floating down from the sky, Navajo tribesmen of Monument valley in northern Arizona were startled. Later they found it was Major Charles Collier's way of thanking them for their courtesies extended when he had visited their part of the reservation. From Albuquer-que, Major Collier and two companions of the army air corps flew to the Monument valley area, dropped cigarettes attached to tiny parachutes, as the airplane passed over ho-gans of friendly Indians.

Flagstaff . . .

With approximately 20 inches of snow at the Flagstaff snow bowl, skiing conditions were ideal in January. The Arizona bowl is 14½ miles northwest of Flagstaff. A run of 5 to 10 miles, depending upon altitude of the start, is available. Snow reports attracted many devotees following the Christmas holi-

Phoenix . . .

Sixty-one hunters were chosen by lot January 10 for the state supervised annual buffalo hunt in Houserock valley. This year the hunt schedule ran six days, small groups of hunt-ers making their kills daily. Each nimrod is allowed to kill one animal picked by the state game commission from the Arizona owned herd which ranges in Houserock.

. . . CALIFORNIA

Calexico . . .

This border city is humming like a beehive, volunteer workers preparing for the 1941 Desert Cavalcade of Imperial valley pageant and festival, to be presented February 20-22. Tom Allen, program chairman, is distributing 10,000 copies of a 60-page de-scriptive booklet and Frank Reynolds, general manager for the pageant announces committee chairmen report their various groups on schedule, making ready for the colorful fiesta celebrating historic development of the fascinating region, from the coming of de Anza in 1776 down to today. Mexicali, across the Mexican line from Calexico, will entertain thousands of Cavalcade guests with two days of gaiety following the Cavalcade

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CALIFORNIA

BETTER DEALERS FEATURE.



FLEXIBLE STEEL VENETIAN BLIND

SLAT

Blythe . . .

In the number of automobiles and trucks entering California from outside the state, Blythe led all highway portals during November, according to figures released by the state division of quarantine. Statewide total of foreign cars during the month was 35,684. Of these 6,476 were checked through on U.S. highway 60 at the local station.

Imperial . . .

When the annual Imperial Mid-Winter fair is held here March 1-9, the big concrete and steel grandstand will have a roof if steel is available for the job. Supervisors voted an appropriation to supplement state aid of \$30,000. Secretary Dorman Stewart states that premium lists are now available for those who are planning to enter products or handiwork in the exposition.

Yermo . . .

Four white deer wandering over the desert from here to Trona made tourists and travelers blink unbelieving eyes. One of the albinos was captured by a highway patrolman, another stirred curiosity near Silver lake. At Trona game wardens were unable to identify the animal. All four wanderers have been returned to their owner, Sydney Smith at Camp Cady.

El Centro . . .

Uncle Sam's coast guard is coming to the desert. Imperial irrigation district directors have granted official permission to the commandant of the guard service to use surface of below-sea-level Salton sea for seaplane landing. The sea is 40 miles long, 10 miles wide

Barstow . . .

For the third time in Barstow's history, fog blanketed the community, following a storm on December 18. Once in the winter of 1917, fog was observed here, again 20 years later, in December 1937, when the mist persisted three days in this usually sunshiny desert city. Of the most recent occurrence, the Barstow Printer-Review says: "Parents comforted young children with the reassurance that the milky substance was harmless and nothing to be afraid of."

Brawley . . .

A few days before Christmas 53 rare whistling swans, appearing out of the sky, observers say, "like a great white cloud," settled on the waters at the state game refuge north of here. They arrived early in the morning, preened themselves on the still waters all day, then left as suddenly as they came, swinging gracefully into the air and heading north. It was the greatest number of these big birds—they weigh from 16 to 18 pounds each—ever sighted in Imperial valley.

Twentynine Palms . . .

Robert Van Lahr recently has been appointed manager of the picturesque Twentynine Palms Inn, one of the best known among desert hostelries. Located originally in the palm oasis before the paved roads came to this desert area, the Inn has been modernized in recent years, cottages added, and many entertainment facilities provided for guests.

El Centro . . .

All-American canal tours for Imperial valley residents and visitors have been arranged by the Imperial Irrigation district. Interested persons are invited to visit the Brawley power plant prior to 9 a.m. on Sunday mornings. Cars leaving that point at 9 a.m. travel via Imperial, El Centro, Heber and Calexico and cars may join the party at the Imperial city hall, at the El Centro county court house, at the Heber postoffice, at Calexico's new postoffice, or at Bond's corner. After inspecting the canal and power drops on the way there is a scheduled stop at Hanlon heading for lunch. Visitors provide their own lunches, the district supplies coffee. After lunch the itinerary takes the tour to Imperial dam via Winterhaven, arriving at the dam at 3 p.m.

Every property owner is a partner in the Imperial Irrigation District

POWER SYSTEM

This great cooperative concern—the biggest business institution in the Imperial valley of California—has been built with the cash and credit supplied by the men and women with investments in this 500,000 acre irrigation project.

Like every other business concern, the dividends from this power system depend on the number of consumers and the volume of their patronage. And, like every other commercial institution, the profits revert to the owners—the people with investments in the Imperial basin.

What will be done with the profits?

The answer is this:

They will be used first to repay cost of the All-American canal.

They will be used to keep tax rates down and eventually bring lower taxes.

They will provide increased drainage facilities.

They will provide more efficient water service.

They will finance extensions of the power lines.

The Imperial valley owner who buys his power from a competing utility company is like the stockholder in a grocery store who buys his bacon and eggs from another grocer down the street. It just isn't good business!

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MANAGING OWNERS

Wild burros threaten bighorn sheep in the Boulder dam recreational area, says a report by W. B. McDougall of the wildlife service, U. S. department of the interior. In competition for food and water the sheep are coming off second best, McDougall believes. Although this desert region has the largest reservoir in the world, banks of the lake are so steep large animals will be unable to get water except in a few places. Special aid for the bighorns is proposed by the national park service.

Reno . . .

What Key Pittman, senator from Nevada, wanted in the way of a monument is disclosed by his widow in a letter to friends. "He said if he should go first, to bury him in the desert and cover him with sand. Then he added, 'No, don't do that, the coyotes would dig me up . . . Bury me on the highest mountain top where I can see in every direction.' We both agreed on a monument built of Nevada rock in the style of the Washington monument, on a mountain top." Residents of the state are raising funds for a Pittman memorial.

Carson City . . .

Range conditions throughout the state are "extremely favorable," announces L. R. Brooks, regional grazier. Comparatively mild temperatures and abundant moisture are responsible for better than normal feed supply, and with average snowfall, livestock is wintering well on range. Brooks reports outlook for ranchers is "particularly optimistic" in view of rise in livestock prices.

Reno ...

Nine weddings for every divorce. This is Reno's record, despite its worldwide reputation as a divorce center. Elwood Beemer, county clerk, advances the theory that the army draft, plus California's three-day waiting period for impatient lovers and the physical examination law in the Golden state, all combine to step up the year's wedding record of 18,000 coupled, as compared to a mere 2,000 seeking separation.

NEW MEXICO

Mills ...

Announcing a big jackrabbit drive at his ranch near here, Elbert Piper late in December said rabbits had destroyed thousands of acres of crops in that part of New Mexico. It is a common sight, he declared, to see more than 100 jacks in a single field. No fields were listed for the drive unless they could turn in a rabbit census of more than 150 rabbits per field.

Albuquerque . . .

New Mexico's 5,000 woolgrowers, producing 12 and one-half million pounds of wool a year, will be an important supply link in producing adequate clothing and bedding for this nation's vastly expanding army and navy. Requirements for new army recruits are listed as nearly 700,000 woolen overcoats, 500,000 woolen service coats, 2,500,000 woolen undershirts and same number of woolen underpants, and more than 3,400,000 woolen blankets. Material required for these items is now being delivered at the rate of about one million yards a week.

Roswell . . .

Part of famous Jinglebob ranch, pioneer John Chisum's home south of here, has been sold by Cornell university to a local company. Chisum gave his name to one of early New Mexico's famous cattle trails.

Zuni . . .

Gayest of all southwestern Indian parties, Zuni's feast of Shalako wound up its annual 48-hour fling with departure of messengers from the rain gods returning to Heaven amid omens for success and prosperity during the New Year for this pueblo tribe. Six couriers, bearing 11-foot costumes, completed their foot-race trials without a hitch. Thousands of guests, red and white, were entertained by the Zuni people during the feasting.

Fort Stanton . . .

Wonder what Billy the Kid would say about the transfer of 300 Nazi sailors from the scuttled German liner Columbus to a concentration camp here in the heart of the country he helped to publicity. The German refugees will be housed in an abandoned CCC camp near here on removal from Angel Island in San Francisco bay. They will not be able to do very much missionary work for the Nazi cause in this sparsely populated land of bed-rock Americans.

Santa Fe ...

Charge this one to Elliott Barker, state game warden: New Mexico ranchers are aces as riders, but a Sierra county rancher, Dick Nunn, has hung up a record by out-sprinting his horse. A wounded bear was chasing him. The race started when Nunn dismounted from his horse, shot the bear twice. Then man, horse and bear went into high gear. Horse had a head start, but Nunn breezed by his mount, "like an Olympic star." Nunn killed the 550-pound bear after bruin caught the horse and sent the saddle flying with one swipe of its paw.

UTAH

Salt Lake City . . .

Highest in any year in the state's history, Utah taxes for 1940 will run to nearly \$35,000,000. Increase in property taxes is only \$200,000 above 1939, but rise in special taxes is expected to total \$2,000,000, due almost entirely to improved business conditions.

Delta . . .

Eighty-four-year-old Reuben Gardner went deer hunting in the Pine valley mountains of southwestern Utah. Reuben killed his own deer and then shot two more deer for hunters who had failed to get their quota.

Ogden . . .

The west has been all too modest in asking the federal government to develop its national parks. So says J. W. Robinson, congressman from Utah, completing a tour of national and state parks in eastern and southern states. Congress hereafter should be more generous in appropriation for western parks and for CCC camps, he declares.

Salt Lake City . . .

Andrew Jensen, 90 years old, spent his birthday in December at his office reading proof on his forthcoming book, "An Encyclopedic History of the Church." In the evening he received hundreds of friends, presided at a family dinner party attended by six sons and daughters, 10 grandchildren, seven great-grandchildren. Jensen is assistant Latter Day Saints church historian.





Perocactus johnsonii

(Parry) Br. and R.

By GEORGE OLIN

This compact little cactus was for many years considered a tiny brother of the bisnaga, (Ferocactus acanthodes) or common barrel cactus of our far southwest. In more recent years however, evidence has been gathered that proves rather conclusively that it does not belong to that genus, but to another quite far removed. Since it is not our purpose to pin it down to a precise scientific classification but rather to learn to recognize it when we see it

Common names for Ferocactus johnsonii are rare because of its comparative scarcity. The only common name I have heard for it is "purple hedgehog" which alludes to its richly colored spines and the protection which they afford the plant body.

The hedgehog cactus is hardy not only in appearance—it ranges through an area where nature is anything but lavish with favors to her plant subjects, and at an altitude which insures bitter cold during the winter months. Its habitat may be given in a general way as a

clinging to its rocky hillsides, the name Ferocactus johnsonii which was given it in 1922 by Britton and Rose will identify this spiney little fellow to the botanically minded. Common names for Ferocactus johnsonii

Photograph of Ferocactus johnsonii taken by the author 30 miles north of Las Vegas, Nevada.

broad belt about 150 miles in width which extends from Inyo county in California through southern Nevada, southern Utah, and northwestern Arizona. Never plentiful, it is usually found in the largest colonies and in the best condition at altitudes of from 3000 to 4000 feet.

In appearance a large plant in good condition is most attractive. It is a small graceful barrel which usually does not exceed 10 inches in height. The plant body is a fresh dark green and is almost hidden from sight by the heavy armament of reddish grey purple spines. These are borne from the tips of the tubercles which form the spiral ribs towards the tip of the plant. The precise arrangement of the tubercles and spine clusters, and the graceful curves described by the spines themselves, combine to create a most pleasing effect.

The flowers are very showy and range in color from a clear pink through deep red, and in one type they shade into a good purple! They rise from the very tip of the plant and since this independent little hedgehog seldom seeks protection under the desert shrubs, it is visible for some distance when in bloom. The fruits are more or less a miniature of those of the big barrel-naked, leathery, dry pods which contain large numbers of fine black shiny seeds. These, like the seeds of so many others of our native cacti, bear a delicate veining or reticulation which is visible under a low power glass.

In the wild state, fine specimens may be found on the rocky slopes with southern exposures between Las Vegas and Searchlight, Nevada. These are the reddish grey purple type and represent the plant as described. A particularly robust type with straw yellow spines may be found along highway 91 between Beaver Dam lodge near Littlefield, Arizona, and the summit of the long grade north towards Santa Clara, Utah. This type has a purple flower and specimens may easily be seen from the road during the latter part of May when they are usually in bloom.

When brought into cultivation this little beauty is most disappointing. In its habitat it seems to require a soil richly charged with lime and capable of perfect drainage. Even though these conditions are artificially provided in the garden the plants will not thrive and soon nothing remains of them but an empty basket of the interlocking spines from which all the color has faded.

PHOENIX CACTUS LEADER NATIONALLY HONORED

Mrs. Gertrude D. Webster, at the National Federation of Garden clubs convention at Portsmouth, Maine, was named the garden club president who has done the most outstanding work of any woman in America in promoting her organization.

her organization.

At the same time, the Arizona Cacti and Native Flora society, which she founded and still serves as president, received honorable mention at the New York World's fair for three photographs submitted by members of this Phoenix society. These are now on display in the lecture room of the administration building at the Desert Botanical Gardens.

At a recent meeting of the group, Lyman Benson, assistant professor of botany at the university of Arizona, spoke on the subject of



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BOX T-4

cacti to be found in Arizona, and showed motion

pictures of many species.

Officers announced at this meeting were Mrs. Webster, president; Matt Walton, first vice president; Rev. Charles A. Dowdell, second vice president; W. E. Walker, third vice president and treasurer; Mrs. Fred Winship, fourth vice president and chairman of social committee; Mrs. A. H. McFarlan, fifth vice president, librarian and press chairman; Mrs. W. E. Walker, secretary.

The Desert

Classified advertising in this section costs five cents a word, \$1.00 minimum per issue—actually about 2½ cents per thousand readers.

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> W. E. HANCOCK "The Farm Land Man"

El Centro — — — California

Mr. and Mrs. R. G. McDonald, Desert Garden club members of Boulder City, Nevada, were awarded the 1940 Colburn Trophy for the best rock and cactus garden.

.

Cactus exhibitors will have a place in River-side county fair and Coachella valley date festival, to be held in Indio February 20 to 23. The two classes in which they may enter exhibits are Rock gardens not over 24 inches square, including cactus, succulents and miniatures, and Dish gardens not over 15 inches in greatest dimension.

Weather

FROM PHOENIX BUREAU

Temperatures—	Degrees
Mean for month	56.8
Normal for December	52.0
High on December 8	83.0
Low on December 15	32.0
Rain-	Inches
Total for month	3.75
Normal for December	1.00
Weather—	
Days clear	7
Days partly cloudy	6
Days cloudy	18
G. K. GREENING, Meteoro	logist.

EDOM MUDICAL DUDEATE

FROM YUMA BUREA	\U
Temperatures—	Degrees
Mean for month	59.0
Normal for December High on December 3	55.2
High on December 3	80.0
Low on December 15	39.0
Rain-	Inches
Total for month	0.79
70-year average for December .	
Weather—	
Days clear	15
Days partly cloudy	10
Days cloudy	6
Sunshine 72% (222 hours of the hours.) Lowest sunshine percensince January 1930.	possible 311

D. R. HARRIS, Meteorologist.

ICKES APPROVES TWO TRACTS FOR 5-ACRE HOMESTEADERS

Two tracts of Southern California desert land have been approved by Secretary Ickes of the interior department as available for lease in five-acre tracts for home, cabin, health or convalescent purposes as provided by the Five Acre Tract law of 1938, it was announced Jan-

Constituting the first portions of the public domain to be classified as available for use under the act, which authorizes the leasing of small areas outside certain national reservations for home, cabin, camp, health, convalescent, recreational or business site purposes, the Southern California tracts embrace approximately 960 acres in the Mojave desert region in the vicinity of Twentynine Palms, and proximately 360 acres in the Morongo valley, encompassing part of the San Bernardino moun-

tains about 100 miles east of Los Angeles. Under regulations of the General Land Office, applications for lease of the public domain in five acre tracts were first ordered receivable on August 9, and, as a consequence, 142 applications have been placed on file for these tracts in the Twentynine Palms area which involve about 710 acres, leaving approximately 250 acres yet to be filed upon.

In the Morongo valley area, about 58 applications have been received, involving about 290 acres, leaving about 70 acres still subject to application for leasing under the Act.

Under the regulations, rental of \$5 per year

will be charged by the government for the use of the land, with the leasing period running for five years, except in special instances to be determined by the commissioner of the General Land Office.

The Southern California areas may not be used for business sites "or such camp sites as involve the erection of simple and temporary" structures such as tents, tent platforms, etc. These two tracts totalling 1000 acres are available only as home, cabin, health and convales-



C OF YESTERDAY AND TODAY

—α monthly review of the best literature of the desert Southwest, past and present.

CONQUEST OF DEATH VALLEY TOLD IN VIVID NARRATIVE

During the 92 years that have intervened since the Jayhawker party of goldseekers faced starvation and death in the Death Valley region of California, this forbidding desert area has emerged as one of the most popular winter playgrounds in the arid Southwest.

Death Valley has not changed — but the courage and resourcefulness of the white man have conquered its terrors. Many men and women have contributed to this transformation -prospectors and hardrock miners, engineers and promoters and bankers, and finally the men

of U. S. park service.

C. B. Glasscock has written about these peo-ple, their disappointments and successes, their courage and their defeats, in HERE'S DEATH VALLEY, recently from the press of the Bobbs-Merrill company, Indianapolis.

It is a book of Death Valley history, but

vivid and sparkling because it is written around the personalities and achievements of the in-dividuals who played leading roles in the life of the region.

There is Indian George, aged Pahute who has been an actor in the Death Valley drama since that boyhood day in 1849 when he saw members of the Manly-Bennett party struggling across the floor of the valley toward the western mountain range. There is the little school teacher who brought culture to Death Valley junction, Ed Stiles who jerked the 20-mule-team borax wagons across the salt flats, C. B. Zabriskie, John Ryan, Borax Smith — these and hundreds of others are presented in intimate detail.

Here is told, probably for the first time, the true story of Death Valley Scotty, the mythical gold mine that has given him front page space on the newspapers for nearly 40 years—and the true source of his income.

Much of the book is written from the author's personal knowledge of the people and the incidents. C. B. Glasscock was one of the publishers of the Death Valley Chuckawalla boom-camp newspaper that flourished for a few weeks and then died when the Greenwater strike proved to be a dud.

The entire panorama of Death Valley's history is presented in a fascinating manner that insures for this volume a top place in the annals of the old West. Illustrated with photo-

graphs. Index. \$3.00.

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WILDLIFE AUTHOR-ARTIST WRITES AUTOBIOGRAPHY

Ernest Thompson Seton won world-wide fame as naturalist, artist and lecturer before he became associated with life in the Southwest. The story of his life from his birth in England in 1860 to his founding of Seton Village near Santa Fe, New Mexico in 1930, is told in his autobiography TRAIL OF AN ARTIST-NAT-URALIST, published by Charles Scribner's Sons, New York, 1940.

The conflict of two opposing forces dominated his early life. Even greater than his strug-gle against poverty and physical handicaps was the conflict between the boy's hunger for the life of a naturalist and the imposed career of an artist. But it was the combination of these two elements which led him to the high place he later attained.

Between periods of life in the forests and prairies of Canada, he studied art in London and Paris, and did commercial art work in New York City. Even as a youth his writings began to appear in scientific journals. And with the acquaintance of C. Hart Merriam, commissions came for illustrating such works as Reports of the Biological Survey in Washington, the Century Dictionary, Frank M. Chapman's Handbook to the Birds of America and Bird Life. Among his own works, employing his artist-naturalist abilities, were Birds of Manitoba, Lives of Game Animals, Life Histories of Northern Animals, and the best-seller Wild Animals I Have Known.

Human interest in this journal is augmented

by the candid, even naive style. Excerpts from early nature diaries and incidents concerning men in the world of art, literature and science are interesting variations. Appendix, index. Photos, drawings by the author. 412 pp. \$3.75.

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Following are some titles recently added to our Bookshelf-some of them new, some of them long in print—all of them vivid portrayals of vital phases of the Southwest.

NEW MEXICO HOME PLAN BOOK. Just the book for those who are considering pueblo style of architecture for the new home. Beautifully illustrated.

HERE'S DEATH VALLEY, by C. B. Glass-cock. Vivid historical volume written around the colorful characters past and present in the Death Valley region. 314

THE DEATH OF BILLY THE KID, by John W. Poe. The author was Sheriff Pat Garrett's deputy. Regarded as an authentic record. 60 pp. \$1.25

DESERT PLANTS AND ANIMALS, By
Oren Arnold and Mabel Earp Cason. An
illustrated primer describing 42 of the most common plants and animals in the desert zone, 93pp. \$1.00

AN EDITOR ON THE COMSTOCK LODE, by Wells Drury. Story of the Comstock lode and the men and women who played lead roles in the old mining camp-written by a man who was there. 330 pp. Index \$1.00

HALIKSAI, A book of Hopi Legends as told to Harry C. James. Folk tales of the Hopi mesa, illustrated by an Indian artist. 28 pp.

ACOMA, The Sky City, by Mrs. William T. Sedgwick. Story of the historic pueblo of the Keres people in New Mexico, and of the Spanish invasion. Photographs. 288 pp. Appendix, Bibliography. Index \$2.50

RHYTHM FOR RAIN, by John Louw Nelson. Drama and ancient culture of the Hopi Indians, portrayed in the epic story of the Great Drought. 263pp. Glossary of Hopi words

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TRAGIC DEATH VALLEY TREK PRESENTED BY HISTORIAN

Many versions have been printed in books and magazines about the experiences of the Sand Walking company which left Salt Lake City in the fall of 1849 to travel overland to the gold fields of California. The original records of this historic trek are meager, and the dissension which developed along the way and caused the wayont train to be split into a number. caused the wagon train to be split into a number of smaller parties, has made it difficult for historians to compile a complete authoritative record of this tragic episode in western history.

However, the records have now been brought together and coordinated in a single volume by E. I. Edwards. His book, THE VALLEY WHOSE NAME IS DEATH was published by San Pasqual Press of Pasadena during the

latter part of 1940.

The author has for many years been assembling a library of first editions and magazine articles on Death Valley and its history—and from these sources has taken the essential facts of the Sand Walking expedition, reconciled them as far as possible, and presented them in a manner that invites respect for their authenticity. The Manly-Bennett party, the Capt. Hunt party, the Brier party—these and all the other separate units into which the original company was eventually divided, march through the pages of the book in orderly procession.

The second part of the volume is a bibliography-the most complete list of book and magazine sources that has been compiled on Death Valley. This 122-page book is an important contribution to American historical libraries.

HERE IS A PLAN BOOK FOR YOUR PUEBLO-STYLE HOME

One of the finest contributions of the American Indian to the invading white man has been in the field of architecture—the building design of the native pueblo Indians of New Mexi-

Yet despite the popularity of the pueblo pattern both for home and commercial construction, little has been available in the way of published literature to aid the builder in propagation of his plans.

Editor George Fitzpatrick and his associates on the staff of New Mexico magazine have recently prepared a booklet which will go far toward meeting this need. The NEW MEXICO HOME PLAN BOOK is a beautifully illustrated brochure of 35 pages containing plans designed by a number of the leading architects of the Southwest. Several pages also are devoted to interiors, patios and color schemes.

This book is the answer to many letters writ-

ten to the Desert Magazine office inquiring as to where information may be obtained regarding pueblo architecture. Published by Santa Fe Press, Santa Fe, New Mexico. \$1.00.

REFERENCE LIST PUBLISHED FOR STUDENTS OF NAVAJO

extensive BIBLIOGRAPHY OF THE NAVAHO INDIANS, compiled by Clyde Kluckhohn and Katherine Spencer, was published in 1940 by J. J. Augustin. Its primary interest is for anthropologists, although this is such a broad subject, with so many implications, that those interested in nearly any phase of the Navajo will find many references.

Careful subdivision of the material assures

easy use. Of these broad divisions—Historical, environmental, anthropological, relations with whites, and popular—only the third is considered by the authors to be exhaustive. This section includes archaeology and origins, physical anthropology (including medical work), linguistics (including vocabularies), and ethnology, the latter again subdivided. 93 pp. \$1.50.

EASY IDENTIFICATION OF DESERT PLANTS, ANIMALS

For those who would gain a speaking acquaintance with many of the more common plants, animals and insects in the desert, Oren Arnold and Mabel Earp Cason have written and illustrated DESERT PLANTS AND ANIMALS. Publishers are The Arizona Printers,

Inc., Phoenix, Arizona.

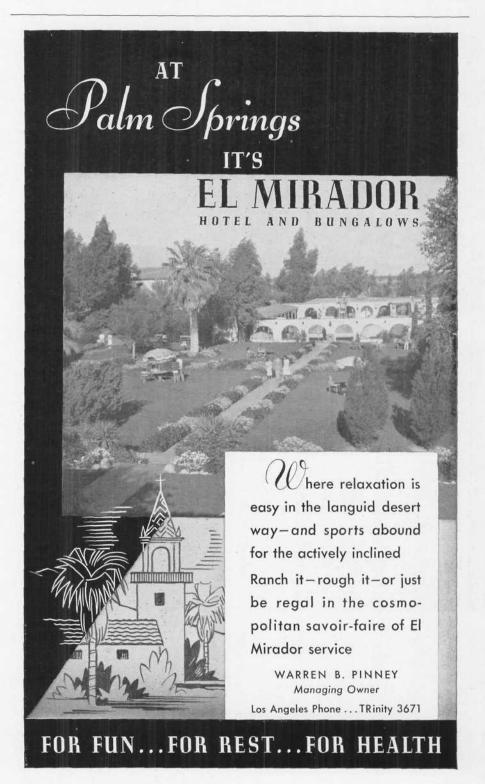
The book includes 61 short descriptive chapters, each devoted to a single subject—Cactus wren, Sidewinder, Mariposa Lily, Tarantula, Saguaro, Mountain lion, etc. Accompanying each word sketch is a pen and ink drawing to illustrate both the subject and its outstanding characteristic.

Desert Plants and Animals is a primer that

will be especially popular for the classroom where nature subjects are taught. It will also be an excellent handbook for desert visitors and newcomers who will want to become better acquainted with the odd species of plant and animal and reptile life to be found everywhere in the arid region. Identification will be comparatively easy with these illustrations as a guide. 94pp.

MAPS

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Gems and Minerals

This department of the Desert Magazine is reserved as a clearing house for gem and mineral collectors and their societies. Members of the "rock-hound" fraternity are invited to send in news of their field trips, exhibits, rare finds, or other information which will be of interest to collectors.

-ARTHUR L. EATON, Editor-

WESTERN MINERAL SHOW TO BE AT EXPOSITION PARK

Visitors at the second annual Western Mineral exposition in Los Angeles February 15 to 22 will have an opportunity to put on rubber boots and wade out into a gravel pool and pan gold for themselves, according to plans an-nounced by George I. Holmes, president of the exposition.

Holmes has promised to bring in two tons of ground high grade ore to be mixed with gravel so that every amateur prospector can get some

John Herman, general manager of the exposition, states that arrangements have been completed to hold the exhibition in the State Exposition building, Exposition park, this year. This will provide much more room than the chamber of commerce basement where it was held in 1940.

"The setting is perfect and space is available to make this display of rare gems and minerals bigger and better than the one at Golden Gate exposition," Herman said.

More than 50,000 specimens from all parts of the world are expected to be on display, and many of the southwestern dealers in gem stones and mining and lapidary equipment will have commercial displays.

By special arrangement with William Mor-ris of Sacramento, the exposition is planning to display again this year a \$50,000 leaf and wire gold exhibit from the Mother Lode, which attracted much interest last year.

Another new feature of the 1941 exposition

will be Navajo Indians making silver and turquoise jewelry, and also native Indian pottery

makers.

DESERT FESTIVAL AT INDIO OFFERS MINERAL PRIZES

More than \$200 is offered as prizes to gem and mineral exhibitors at the Riverside county fair and date festival to be held in Indio, California, February 20-23 inclusive. Secretary George M. Ames announces the following classifications and prizes:

1-Best and most interesting display of mineral resources, gems and gem materials exhibited by an individual or organization. Entry fee \$10. First prize \$50 and trophy, second \$40, third \$30, fourth \$25. Scoring will be on variety 10%, artistic effect 20%, educational value 30%, commercial value 20%, originality 20%.

2-Best display of uncut gem material, to occupy space of not more than 24 inches square. Entry fee \$1.00. First prize \$10, second \$8, third \$6, fourth \$5, fifth \$4.

3-Best display of cut and polished gem ma-

3—Best display or cut and poissed gem material, to occupy space not over 24 inches square. Entry fee \$1.00. First prize \$10, second \$8, third \$6, fourth \$5, fifth \$4.

4—Best exhibit of mineral samples from a property or group of properties the combined mineral production of which was less than 1000 tons of crude ore during 1940. May be in a case furnished by exhibitor or otherwise in a case furnished by exhibitor or otherwise and to occupy space not over 2x5 feet. Entry fee \$3.00. Ribbon awards.

IMPERIAL FAIR OFFERS PRIZES FOR MINERALS

Prizes amounting to \$549 are offered to exhibitors of gems, minerals and non-metallic ores at the annual Imperial county fair to be held in Imperial, California, March 1 to 9 this year.

Entries must all come from Imperial county, and must be accompanied by an entry fee amounting to 10% of the first prize. The following awards are offered:

Placer gold (display), three prizes, total \$50.

Lode gold specimen, three prizes, total \$50. Gold bearing gravels, total \$50.

Silver ores, total \$35. Copper ores, total \$27.

Iron ores, total \$17. Groups of different mineral specimens (all

kinds in display), total \$20.
Asbestos ores and products, total \$20. Mineral fertilizer, analysis furnished, total

Magnesite, total \$10. Soapstone, talc and pumice, total \$20.

Uncut gem materials (best display not over 12 specimens, total \$20.

Spotted gem material's (best display not over

12 specimens), total \$20.
Cut and polished gem materials, unprofessional (not less than six or over 12 specimens), total \$30.

Cut and polished gem materials, open class, (not less than 10 nor over 20 specimens), total \$30.

Petrified wood, uncut, unpolished, (not over eight) total \$15.

Petrified wood, spotted, total \$15. Petrified wood, cut and polished (gems), total \$15.

Crystals, best display (not over 12 speci-mens, each group equals one specimen) total

Limestone and limestone products, total \$20. Clay, specimens, total \$20.

Clay products (including bricks, pottery and tile and other products), total \$20.

AGATE SOCIETY KEEPS OPEN HOUSE FOR VISITORS

Newport, Oregon Agate society has a novel meeting place—a huge room on a bluff, overhanging the Pacific, at Newport Beach. Surf pounding at the base of the cliff and a cheery fire roaring in the great fireplace lend a Seth Parker atmosphere. The meeting place is also kept open during tourist season as a refuge and information bureau for visitors.

Oregon beaches were late in the "opening up" this season. During the summer, sand washes up on the beaches, burying most of the agates, jaspers and other stones, sometimes several feet deep. Winter storms, in turn, carry away the sand and reveal the many beautiful specimens for which the Oregon beaches are justly famous.

All club officers were re-elected for another year: Will L. Grigsby, Newport, president; Mr. Peterson, Agate Beach, first vice-president; Walter Duvaney, Toledo, second vice-president; Nettle Adkinson, Newport, secretary; Mrs. Laura Grigsby, Newport, treasurer.

AMONG THE

ROCK HUNTERS

C. D. Woodhouse, president of the California federation of mineralogical societies, urges each society to sponsor an annual mineral exhibition as a means of stimulating local interest in minerals. It would be advisable to adopt uniform rules for exhibits and for judging at the various shows.

Paul Van der Eike, editor of Mineral Notes and News, California federation bulletins, will welcome suggestions for a more dignified publication in the form of a magazine. It would carry news of the activities of the various groups and knowledge of important mineral locations, and print short articles on mineralogical subjects. Van der Eike's address is Junior College, Bakersfield, California.

M. Leonardi, president of Searles Lake gem and mineral society, addressed the Orange Belt society December 5 on "History of Searles Lake minerals" at San Bernardino Junior college hall. The January 19th field trip was planned for Trona, to collect minerals at Searles lake. December field trip of Orange Belt society was led by Professor E. K. Soper of U.C.L.A. and was made in conjunction with the Los Angeles Rift club for the study of earthquake faults. C. E. Fickenbinder, construction superinendent of Los Angeles Bureau of power and light, addressed the Orange Belt society, January 2, on "Hidden Mysteries of the Mojave Desert."

Wendell Stewart and Earl Calvert have undertaken another collecting expedition into northern Mexico.

Dr. Earl G. Linsley, director of Chabot observatory, used lantern slides and motion pictures to illustrate his lecture on "features of earth and moon, based on the rocks," at the December fifth meeting of East Bay mineral society. The group enjoyed a Christmas party on December 19. Each member brought a gayly wrapped rock specimen and numbered slip as a present; then all members drew numbers for their gifts.

Frank Morse of the Colorado Gem company of Bayfield, Colorado, and R. E. Childs of the Columbian Gem service of Spokane, Washington recently made a trip into old Mexico and most of Arizona and New Mexico after gem materials. They report a fine trip with good success, obtaining opals, onyx and curios in Mexico, Creolite and pink agates at Hot Springs, New Mexico, eye-agates at Deming, rainbow fluorspar at Duncan, Arizona, canadinite, azure chalcedony, chrysocolla and asbestos at Globe, and some fine "picture wood" near the Rainbow Forest, Arizona. They also report more "rock-houns" than ever and all anxious to help.

Dr. Herbert L. Mason, curator of herbarium, University of California, lectured to East Bay mineral society January 16. His topic was "History of California forests, based on fossil material." Dr. Mason, a graduate of Stanford, is thoroughly familiar with this subject, having a wealth of experience both in the field and in the classroom.

Officers of Long Beach mineralogical society for 1941 are: Roy W. Wagoner, president; Karl VonderAhe, vice-president; Marjorie Chalker, secretary-treasurer. The Long Beach group held a mineral exhibit December 30. December issue of Long Beach mineral news carries an article on Amphiboles. William B. Pitts of Sunnyvale has donated a collection of over 200 polished gem stones to the department of mineralogy of Santa Barbara museum of Natural History. Pitts is known for his collection of lantern slides made from thin slabs of minerals. Several of these mineral transparencies are on display at the museum.

Northern California mineral society was entertained at the December meeting by the classes in micro-mounting and lapidary work which have been conducted this fall at the society's headquarters. George H. Needham and Francis J. Sperisen were the instructors. Needham gave a short talk on photographing rock sections, and Sperisen spoke about the fascination of the lapidary art. Examples of the work accomplished by the classes were displayed.

Members of Imperial Valley Gem and Mineral society are preparing their exhibits and entries for the Imperial County Midwinter fair, March 1 to 9.

W. Scott Lewis, Hollywood, California, issues a monthly mineral bulletin in which he lists minerals which he has for sale, with a brief comment on each. Sometimes he devotes the first page of his bulletin to a pointed discussion of some item of importance. The latest issue carries a partial story of his summer trip, during which many specimens were secured.

Sam Payson, member of Imperial Valley Gem and Mineral society, led a group to the thunder egg beds in the mountains in the Chuckawalla area, on the society's December field trip. Wonderful specimens were found, some of the agate closely resembling the Brazilian variety.

. . .

San Diego mineralogical society is studying minerals and gems of San Diego county.

Long Beach mineral society planned its November field trip to Afton canyon, north of Barstow. Dr. Thomas Clements, head of the department of geology at U.S.C., was the speaker at the annual December dinner meeting. He chose for his subject "Emerald Mines of Colombia." Dr. Clements recently made a geological survey of part of Colombia for the government there.

Norman Whitmore spoke on "Mining Geology" at the December meeting of Los Angeles mineralogical society. The group exchanged gift-wrapped rock specimens.

C. D. Woodhouse, president of California federation of mineralogical societies, addressed Santa Monica gemological society at its December meeting, which was held in their new quarters at the city hall. His subject was precious stones and detection of imitations. C. D. Heaton illustrated use of the blow pipe for the identification of minerals. The group met at Rosamond for the December field trip. At the January meeting members exhibited their fluorescent and phosphorescent specimens.

H. V. Sardha Ratnavira was the speaker at the December meeting of Pacific mineral society. Ratnavira is the son of Muhandiram H. V. P. Ratnavira, Ceylon's "uncrowned jewel king" and owner of large gem mines in Ceylon. This clever young Singhalese completed a three years course at the Los Angeles Gemological institute in eight months and is the youngest gemologist in the Orient, being only 21 years of age. He talked on oriental gems and the trickery practised by many of the foreign gem dealers, and illustrated his talk with specimens of genuine and fake gems and the microscope. His talk, given in good English, was full of interest.

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FOUR NEW CLUBS ADDED TO CALIFORNIA FEDERATION

A California federation directors' meeting was held in Bakersfield December 1 to discuss matters pertaining to the welfare of the federation and the coming convention. All member societies were represented either by delegate or

by proxy.

Four new societies were formally admitted to the federation: Santa Monica gemological society, San Fernando valley mineral society, Santa Maria rock and mineral club, and Empire society of Chico. Two other groups are considering affiliation. If they join, it will make the California federation the largest federation of mineral clubs in the United States, with 25 member groups.

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Cogitations

Of a Rockhound

By LOUISE EATON

- Rockhouns out on the desert don't object to insommia. In fact, they sortuv likes to stay awake during the peace of night time an' think uninterrupted about the speciments the've found an' consider what to do with um an' how to cut um. Likewise wher to search next day. Besides, some rockhouns sets their subconscious alarm clocks so that they can cock an hourly eye at the Big Dipper an' watch it make its nightly circle. If a rockhoun needs sleep, he'll sleep; an' if he don't, he'll enjoy stayin' awake quiet like, an' cogitatin.
- It shure is lucky for rockhouns that Mr. Ford an' others got automo-biles invented before the rockitis bug got busy. Just look at the distances what rockhouns travels in their spare time, an' consider how they wouldn't get there if they had to depend on horses. Most all good speciments seems to be at least 50 miles away an' it'd take a extry good horse to get 50 miles in a day—let alone gettin' back again.

PRIZE DIVISIONS FOR OAKLAND MEET ANNOUNCED

More than twice the floor space available for exhibits at previous conventions has been provided for the sixth annual federation convention at Hotel Claremont, Oakland-Berkeley. Reserve the date: May 10-11, 1941.

Prize classification list has been compiled. It

follows:

Federation Members Group

I. Grand prize, society exhibits. II. Amateur mineral collection.

IIIA. Polished slabs.

IIIB. Large polished work.

IV. Cabochon and small stone work.

V. Polished petrified wood.

VI. Jewelry craft. (Piece must contain mounted stone.)

VII. Faceted stones, all classes.

VIII. Best fluorescent collection.

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'Balas ruby" is spinel, which is only eight hardness, and is singly refractive. It crystallizes in octahedrons instead of hexagonal prisms and pyramids. Spinel also contains about 28 percent of magnesia in addition to alumina. Light red spinel is balas ruby, deep red is Siam ruby, orange red is rubicelle; and violet red is alman-

dine ruby.

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RAMBLING ROCKNUTS

Last month Desert Magazine published the first of a series of experiences taken from the notebook of Mrs. Bertha Brown, Seattle collector, who with her husband, spent several weeks traveling through the Southwest, collecting specimens and trading with the "Rocknuts" they met along the way. Here are more notes from Mrs. Brown's diary—telling about some of the places they visited in southern Utah and

By BERTHA GREELEY BROWN

Six days after we had left home in Seattle, Dr. and Mrs. C. T. Lill, my husband, E. K. Brown, and I arrived at Bryce canyon, a natural and fantastic amphitheater cut by the forces of erosion into the plateaus of southern Utah. The back ends of our cars were sagging sadly, weighted down by rocks we had gathered along the way. Part of these had been picked up in mineral fields and the rest were specimens we had traded with fellow rocknuts along the route.

After giving due attention to the area called by the Piute Indian name, "Unka-timpe-wa-wince-pock-ich," meaning, "red rocks standing like men in a bowl-shaped canyon," we drove to the museum at Ruby's Inn, a commercial place just outside of Bryce canyon park.

The manager of the museum, Mrs. Laura Babb, has many Indian artifacts, petrified wood and other specimens which she has gathered herself. She knows southern Utah like a book for she was born at Junction, a town close by Bryce canyon, and has lived in Utah all her life with the exception of a few years when she managed a cattle ranch in western Texas.

At once I could see the light of interest gleam in the eyes of Dr. Lill and E. K. as they cast a glance about Mrs. Babb's store room. I quietly slipped away for fear I might cramp their style of bargaining. When I returned to the scene of "hoss tradin", a row of beautiful paperweights made by E. K. of petrified wood, decorated Mrs. Babb's show cases and E. K. was happily loading Utah fossil-wood into the trunk of our car. Dr. Lill was straining under a load of loot he had bartered for and the three traders looked as if he (or she) was the one leading home the "best nag." The deals ended, we waved goodbye to Mrs. Babb, and with a promise to be back next year, we headed for Cedar City, historic Mormon town in southeastern Utah.

The next morning, at Cedar City, we went to L. A. Burascano's Trading Post to get information about the agate field just north of the town on highway 91. He told us the agates close by had been gathered to build the Cedar City Mormon chapel, also, many persons had put agate fences about their yards. Undaunted by this report, we four scouted along the highway a few miles north of the city limits. Here traffic freshets have blitzkrieged down from the mountains bringing quantities of silicate boulders which can be found in a wide flood swept area. Unless a collector has become satiated with unusual specimen material he will enjoy hunting this field.

Between Navajo bridge on the Colorado river, and Cameron, Arizona, is a place called The Gap. It consists of a Trading Post and a restaurant, yet it is of such importance it appears on the official state highway map. I have a feeling Mrs. Chris Johnson, manager of the restaurant, by her gracious personality, put The Gap on the map.

Mrs. Johnson walked up the gulch back of the restaurant to show us where petrified logs lay half buried in rocky soil. She also gave us specimens of copper ore from the Coconino copper mines located close by The Gap.

So many mineral people stop at The Gap and talk to Mrs. Johnson about "rocks" she is acquiring the rock hobby almost without effort and now has a nice collection of her own.

While in the restaurant, Mr. and Mrs. R. J. Evans of Stockton, Utah, entered. Before we left, we had exchanged addresses with them for they are collectors of fluorescent minerals.

The high spot in our Arizona mineral collecting was at Springerville about 75 miles southeast of the Petrified forest of Arizona.

Two years ago, E. K. and I drove through Springerville and stopped at the gas station, when we saw some perfect specimens of car-nelian agate. The store clerk volunteered the information they were found along the highway farther south. We started on our way with high hopes of gleaning from the very roadside, beautiful carnelian. These hopes were dashed for none of this clear red agate was in sight. Zero weather and crowding time pressed us southward.

This year we made another try and by sheer luck we found the man who could give us all the answers, Frank Wright, the owner of the collection I had seen two years before. Mr. Wright, at one time, owned a guest ranch in the mountains south of Springerville and became interested in "purty rocks" found at the base of mountain cliffs. He retired a few years ago and now, in the summer time, lives in a trailer house parked on the ranch of his old neighbor and friend, Sylvester Hulsey.

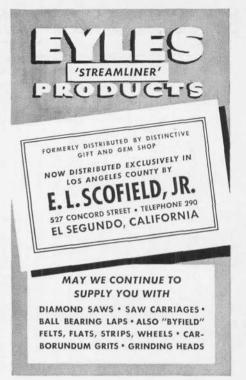
At eight o'clock the following morning we four rocknuts were, by invitation, at the Hulsev ranch at the base of Escudilla peak. We will never forget the simple sincerity with which Mr. Wright, Mr. Hulsey and Mrs. Knowlton (Mr. Hulsey's daughter) greeted us four strangers and accepted us as friends.

The Hulsey yard was strewn with minerals collected over a period of several years. No trades were made. Rather gifts were in order. We were told to take anything we wanted and we selected some lovely specimens trying not to pick those we thought they valued most. We gave them petrified wood that had been polished. Among the things we are taking home are two banded agates, the largest we have seen outside of Brazilian material. We will cut and polish these on shares. One specimen given us has caused a great deal of comment. It is a pale bluish chalcedony geode with large botryoidal forms covered with a multitude of minute crystals.

We left the Hulsey ranch knowing we had met people who were "the salt of the earth" and a feeling of indebtedness for their hospitality still lingers.

When saying goodbye, Mr. Hulsey, the unpretentious, kindly, old ranchman turned to me and said, "I feel this rock hobby has extended the latitude of my thought." "I am sure it has," "and our experiences today was my answer, have increased our faith in the fellowship of

Will L. Grigsby, president of Newport Agate society sent the mineral department of Desert Magazine a small pebble of very interesting type. It is a replacement. The original stone was cream colored common opal. This was either broken, or acted upon by acid so as to leave numerous small cavities. These have been filled by white to grey limestone replacement. Similar replacements were found on the beach south of Santa Barbara, California, but the ones at hand show common quartz, instead of fluorescent opal, in the original rock.



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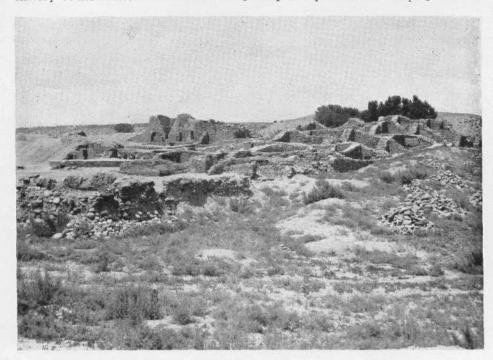
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Grace Morse of Bayfield, Colorado was winner **AZTEC RUINS** Grace Morse of Bayfield, Colorado was winner of the December Landmark contest of Desert Magazine, identifying the accompanying photo-

graph as the partially restored main pueblo of Aztec Ruins national monument in New Mexico. Many excellent manuscripts were submitted in the December contest, but the detail in Mrs. Morse's story was the most complete as to the history of the monument. The winning story is reprinted on this page.



By GRACE MORSE

N San Juan county, northwestern New Mexico, one mile north of the town of Aztec is located the Aztec Ruins national monument. The picture shows the main pueblo in the monument. Leaving U.S. Highway 550 at the west end of the bridge across the Animas river, and traveling north over a paved road for seven-tenths of a mile the monument headquarters is reached. Here one finds ample parking space in front of the museum which houses many artifacts taken from the ruins.

T. C. Miller, custodian and Homer F. Hastings, ranger, are stationed at the monument for the purpose of guiding and informing the visitors, as well as for the protection of the ruins. The monument is open daily throughout the year. A fee of 25 cents is charged for all persons over 16 years of age. Last year there were 10,-422 visitors.

The name Aztec may be misleading as these ruins have no connection with the famous Aztec Indians of Old Mexico. Perhaps one of the early white settlers had heard of the Aztec Indians and applied the name to the ruins. Later when the town was built it took its name from the ruins.

In August, 1859, Capt. J. S. Newberry, a geologist made the first written record of the ruins. In July, 1878, Lewis H. Morgan examined the locality and published a good description and fairly accurate ground plan of the pueblo.

The land on which the ruins are located was patented in 1889 to John R. Krontz, who later sold it to H. D. Abrams, who in 1920 sold it to the American Museum of Natural History. Funds for this purchase were furnished by Archer M. Huntington. In 1922 the ruins were donated to the United States and in 1923 President Harding proclaimed them a national monument.

In the spring of 1882 a shaft was driven into the northwest corner of the ruins, several rooms excavated and a number of specimens taken. It was between the years of 1916 and 1921 that nearly all of the excavating was done, under the leadership of Earl H. Morris, well-known archaeologist. All except 150 of the 500 rooms were excavated. Two of the 52 kivas (ceremonial chambers) have been reconstructed. One of these kivas, second largest of any in the southwestern ruins measures 48 feet in diameter.

The pueblo built like a huge letter E facing southeast overlooking the Animas river could easily have housed 1,000 to 1,500 people. It is believed these dwellings were built and occupied by pueblo Indians coming from the Chaco canyon region on the south about 1100 A. D. Nearby rocky ledges furnished the stones for the walls and mud was used for mor-

tar. Timbers cut with stone axes formed floor, ceiling, and roof beams. According to the most recent information these timbers were cut between the years 1106 and 1121 A.D. These were the years of the greatest building activity.

After living here for perhaps a century or more these people abandoned the buildings and the ruins furnish no clue to the cause. Sterile trash-mound layers bear evidence that these dwellings lay untenanted for many years. About 1252 migrating people from the Mesa Verde region to the northwest established themselves in the pueblo. They stayed for many years, then moved away. The cause of their going remains as much a mystery as that of the first inhabitants. Centuries passed and the elements reduced the pueblo to a mound of debris awaiting the coming of the modern archaeologist to excavate the ruins and discover all that is known of the ancient dwellers.

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MAGAZINE

EL CENTRO, CALIFORNIA

Mines and Mining.

Nearly as large as a sea-going freighter, a gold boat floats in a Nevada desert canyon! Among many amazing true stories of mining in the arid southwest, this huge steel ship rates high. Howard Kegley writes in the Los Angeles Times, "If the men who worked with pick and shovel in Gold canyon 80 years ago could return today their astonishment would baffle description. In the gulch where they gophered around there arose this month they gophered around there arose this month a gigantic structure of steel—floating in an artificial pond created by water from deep pump wells." The "boat" is 105 feet long, capable of washing 10,000 yards of earth every day. It will scoop up the old Dayton townsite in the canyon through which travelers passed on their journey from Carson City to Virginia City in pioneer days of boomtime mining. It is a notoriously dry region.
"About the last thing a pioneer miner would expect to see in Gold canyon would be a huge steel boat floating on a pond, while gold gatherers sift perhaps \$2000 worth of golden grains a day out of a sedimentary deposit," says Kegley.

Bisbee, Arizona . . .

Phelps Dodge corporation announces all employes called for military service will be granted leave of absence plus one month's wages. On completion of training drafted or volunteer service men will be given their same positions with no loss of seniority. Thousands of men are employed by the corporation here and at Douglas, Morenci, Clifton and Ajo.

Darwin, California . . . Darwin consolidated tungsten corporation reports first shipment of 25 tons of scheelite ore carried a value of 5 percent. Ten men are doing development work. Curley W. Fletcher, president and manager, says plans are being completed for a concentration plant with initial cost of \$30,000. The district has been a long-time producer of lead-silver ore.

Reno, Nevada . . .

Twenty-fifth distribution of profits has been announced by Getchell Mine, inc., at the rate of 3 cents a share. Officials said \$1,-305,000 has been disbursed in dividends since August 1938. The company's property is located on Kelly creek in Humboldt coun-

Washington, D. C.

National defense demands for zinc will be met adequately in 1941, according to a survey by producers and smelters in conjunction with federal officials. Smelter output in 1941 is expected to total 860,000 tons, with esti-mated domestic requirements of 780,000 tons. Foreign orders will require about 105,-000 tons, probably to be supplied by importing zinc. Bottleneck lies in inadequate smelting capacity. Supply of concentrate, from which refined metal is made, is plentiful, but production will lag until current smelter rehabilitation programs show results.

Albuquerque, New Mexico . . .

Add another woman mine operator to the list. Miss Blenda Bagge has arrived from New York at the Last Chance gold and silver mine at Mogollon, to succeed her father, late Nils Olof Bagge, as mine manager. The properties are producing. Miss Bagge will take active management. She has employed a mining engineer as an assistant.

Bingham, Utah . . .

Greatest mining project in Utah since the early days of Utah copper company's Bing-ham development, the million-dollar Elton drainage and transportation tunnel will be completed by April 1, 1941, under present schedules. The bore is $4\frac{1}{2}$ miles long, 12 feet high and 11 feet wide. It will drain lower levels of National Tunnel and Mines Company's Utah Apex mine on upper Bingham and will transport miners from Tooele valley to their work and return. Engineers say it will enable miners to reach rich ore bodies now covered by water. The work is being done by a subsidiary of Anaconda copper company.

Salt Lake City, Utah . . .

Utah Copper company, the state's largest taxpayer, in December paid \$1,363,812.11 to Salt Lake county in a single check. The company's total tax bill in Utah in 1940 was \$2,226,506.72.

Kimberley, Nevada . .

Each married employe of the Consolidated copper mines corporation was presented with a turkey for Christmas. This custom was established by the company several years ago, required more than 500 birds, weighing in the aggregate nearly three tons.

Battle Mountain, Nevada . . .

With a \$1,050,000 loan from the Reconstruction finance corporation, Greener placer company will sink several shafts in the Copper canyon placer ground, the company announces. Surveys of the property, made at a cost of more than \$100,000, indicate extensive acreage of commercial values in placer gold, it is reported, and previous small-scale work is said to have produced satisfactory re-

Phoenix, Arizona . . .

Regulations have been announced by the general land office to protect mining, home-stead and other rights of those called for military service. Notice must be filed in the military service. Notice must be filed in the county office where location notice or certificate is recorded, to gain relief from necessity of performing the \$100 annual assessment work on mining claims, and claimant must make application before end of the assessment year, at noon on July 31.

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Among people with only a limited knowledge of botany, flowers generally are identified by their blossoms. But here is one of the blossoming plants of the desert that will be recognized at any season of the year by its gracefully inflated stalk. This is Desert Trumpet or Bottle Plant. It is a member of the Buckwheat family, and since the Buckwheat family, and since the Buckwheats are among the most common of the flowering plants in the arid region, Mary Beal has given brief description of several of the species.

Desert Trumpet

By MARY BEAL

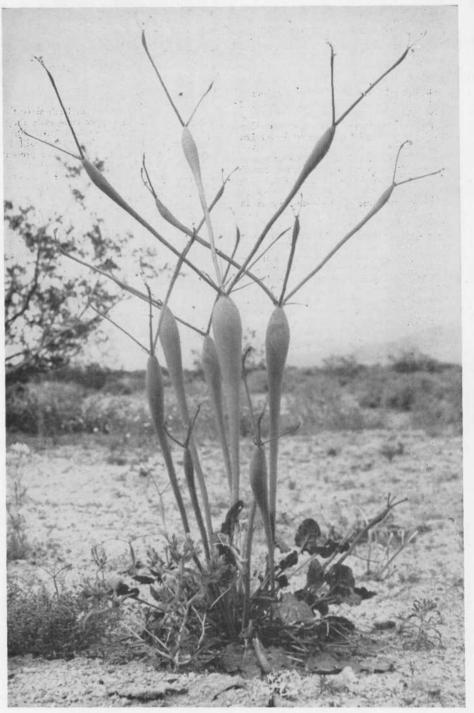
HIS oddity of desert vegetation lays no claim to beauty but I venture to say that few desert plants, blessed by that coveted gift of the gods, attract more notice than this fantastic member of the Buckwheat family.

Its pale blue-green hollow stems, conspicuously swollen and frosted with a whitish bloom, always kindle the interest of strangers and even those of us who see it daily find it an intriguing expression of one of Mother Nature's most whimsical moods.

Botanists have given it the name Eriogonum inflatum but its every-day friends call it variously Desert Trumpet, Bottle Plant, Indian Pipe or Pipe-stem, and Pickles. The last name was inspired by the acid flavor of the young tender, green shoots, quite tasty as a relish or for use in salads, to be eaten raw.

There may be only one main stem or several—I've seen more than two dozen rising from a silver-sheened basal rosette of roundish hairy leaves, the wavy margins red or sometimes the whole leaf tinged red. Each stem branches repeatedly to form a wide-spreading structure 8 inches to 3 feet high. Its final aspect is a lacy effect of thread-like pedicels set with tiny yellowish flowers which are clustered in a top-shaped involucre. During the fall the plants turn reddish-brown, their stiff dry forms uniquely decorative all through the winter.

Desert Trumpet occurs abundantly in the Mojave desert from valley to mountains and is not uncommon in the Colo-



This excellent photograph of Desert Trumpet was taken by Phil Jones of Burbank, California

rado desert, Arizona, Nevada, Utah and New Mexico.

The Buckwheat family supplies so many desert plant species we can mention only the commoner ones of the Trumpet's branch of the family, the Genus *Eriogonum*.

Eriogonum trichopodum (Eriogonum trichopes)

Often called Little Trumpet. Similar to inflatum but attaining only half the height, with shorter internodes and only the basal one inflated, the herbage a bright yellow-green, the leaves crinkly, the minute flowers greenishyellow. It is abundant on flats and slopes of the Mojave desert, often carpeting acres of ground, coloring the landscape, especially in its reddish age. Less common on the Colorado desert.

Eriogonum deflexum

Known as Skeleton Weed. Common on flats, washes, and foothill slopes of the California deserts, Arizona, through Nevada into Utah. A broad intricately-branched annual 5 to 14 inches high, with flattish or depressed top, the roundish felt-like leaves in a basal rosette. The tiny flowers are white with reddish mid-vein or entirely pink, in open panicles on deflexed pedicels, blooming in late summer and early fall. In age the whole plant turns deep rustyred, retaining its stiff skeleton form for more than a year.

Eriogonum nidularium

Bird's Nest we commonly call it, though some prefer Whisk Broom, which it resembles in youth. Low and small, it is only 3 to 8 inches high, densely branched, inconspicuous in color, with pale-yellow or dull-red flowers. The mature branches curve in toward the center, forming a nest-like plant usually reddish in age. Common in the Mojave desert and into Ne-

Eriogonum gracillimum

A diffusely branching plant 4 to 12 inches high with rather woolly herbage, the oblonglanceolate leaves with revolute wavy margins, not all basal. The rose-pink flowers with spread-

TRUE OR FALSE ANSWERS

Questions on page 10.

- 1—True. The state of Arizona was once part of New Mexico territory.
- -False. The Colorado desert is in California.
- 3—False. Needles peaks were named in honor of Capt. Needles of the U.

- S. Army.

 4—False. Chrysocolla is a copper ore.

 5—True. February 14, 1912.

 6—False. The Navajo were nomads.

 7—False. Twentynine Palms is the nearest postoffice.
- True. 9-True. The tarantula is compara-10-False.
- tively harmless. -False. Yucca belongs to the lily
- family. -True.
- 13—True. True. 14
- -False. Administered by the U. S. park service. 17-True.
- True. -False. California was annexed to the Union in 1846, three years be-fore the Jayhawker trek.
- -False. An arrastre is used for breaking up lode ore.

20-True.

ing tips, on thread-like pedicels. Frequent in central and western Mojave desert to Arizona. Eriogonum angulosum is similar in appearance but the stems are angled and flowers white or pink, the outer segments concave. Common in Mojave desert and eastward to Arizona.

Eriogonum pusillum

From 4 to 12 inches high, branching near the middle, the hairy leaves roundish to ovate, involucres glandular and the flower segments bright-yellow with red centers. Common on Mojave desert plains and mesas from moderate elevations to higher mountains, extending to Nevada and northwestern Colorado desert,

Eriogonum reniforme

Similar to pusillum but the leaves kidney-shaped and involucres not glandular. Common on sandy flats of the California deserts, into Nevada and Lower California.

Eriogonum thomasii

Another of the small-fry, 4 to 8 inches high. With one to several stems from the basal tuft of roundish leaves, the minute flowers dull-yellow aging white or rose, the heart-shaped base of the segments inflated at each side. Frequent in California deserts to Nevada, Utah and Arizona

Eriogonum deserticola

The Goliath of the desert Buckwheats. A broad, many-branched, woody shrub 2 to 5 broad, many-branched, woody shrub 2 to 5 feet high, the young leafy shoots whitish with soft hairs, which disappear with age as do the small ruffly leaves. The yellow flowers are silky-hairy. Common on southern Colorado desert sands, especially noticeable in the Yuma dunes and below Salton sea.

dunes and below Salton sea.

Eriogonum fasciculatum var. polifolium
Goes by the name of Flat-Top or Wild Buckwheat. A shrub 1½ to 2 feet high with woody
base and rigid leafy branches. The small, narrow, clustered leaves are greyish and hairy, the
tiny flowers white or pinkish, quite deep-pink
in bud, in crowded umbels at the end of long

stiff peduncles, turning rusty-brown in age. A valuable honey plant, beloved of bees, the honey finely flavored. Quite common on high mesas, foothill and mountain slopes of the California deserts and Nevada.



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Enclosed find my check for \$2.50 for my subscription for Desert Magazine and the binder. I may be wrong but somewhere along the line there has been a slip upon my part. Ever since you started the fine Desert Magazine there has always been one lying around the house somewhere. What I would like to have is a After my good hearted friends get through throwing the copies around for a year, they get rather beaten along the already well worn edges. They enjoy them almost as well as I, but I want to keep them over a few years and be able to read them 10 years from now.

What would be better is to give the binder at the first of the numbers so they can be put in when they have been reread a few times. I bet there are a few others who would enjoy

this service.

R. F. TASKER, Jr.

P. S .- You don't ever have to send me stuff telling me what a wonderful magazine you have to get me to subscribe. Heck I'm just naturally slow.

. .

Beverly Hills, California

Dear Sirs:

Enclosed is \$1.55 for which please send me your newly published book on Everett Ruess, "On Desert Trails."

I have been reading your magazine since I first noticed the articles on Everett Ruess. It seems to me that there is no other magazine that has embodied the romance of a particular locale as yours. All of your articles are well suited and convey in a well-rounded manner the fondness that I am sure many of us have for the desert.

I enjoy particularly the articles on places to go to, for instance, the ones by John Hilton. Also I think that your photographs are excellent; I hope that you keep up the same fine quality that you have in the past. And not to forget, top honors should go to "The Desert Diary" of Mr. South's. I really hate to see the Diary close after a year. Maybe it is popular enough to continue.

There is one thing that must be accented. I have hiked down to Rainbow bridge twice in the past few years. In reference to putting a new road to the bridge, I would like to state that this gorgeous monument would be just another "hot-dog stand" if such is done. But most important, it would lose all the wild loneliness which is so much a part of it. I hope that you declare WAR on this movement, and if I can be of assistance please ask me.

Here's to the Desert Magazine for the recog-

nition that it has shown Everett Ruess.

ROBT. S. TALLY.

Cronese, California

Dear Randall:

Received the magazines about five days in advance of the usual time. Glancing through it trying to decide what to read first I came upon the "LETTERS" and looked over the signatures to see if any of my old friends had written anything. Found one signed Chester A. Pinckham (an old desert rat). Think I can vouch for him as being just what he claims. Wonder if he remembers the kid that clerked in Tingman's store in Indio 1896-1899. Pinckham and Bill McHaney were then pards in the "Snow Cloud" mine in the hills north of Indio I believe. We had a large chunk of the ore for an exhibit on the store counter and you needed no hand glass to see the gold like pepper on a hard boiled

About the speed of a coyote compared with a jackrabbit. I will have to be neutral. The race is usually lost by the one that is the best fed,

Further on a letter from Frank M. Jones asked about Desert Wild Flower seed. I am not sure that I am familiar with all the flowers that he asks for. "Indian Paint Sage"—I know Indian Paint Brush, if that is what he wants. Better take the whole plant when seed is mature unless you gather it with a microscope. What are "Chinese Houses?" Does he mean Evening Primrose after it has ripened? "Desert Marrow"-by any chance is that Desert Mal-

About desert plants-what about Crucifixion Bush? I understand that it is rapidly becoming extinct and my own observation over a considerable length of time leads me to believe it. Not far from Cronese is a small clump of it now in seed. Am intending to gather it and sell to those who live in localities kindly to it. Maybe we can propagate and save it from extinction. I intend to write a short article if I can find the scientific name and get a little more data.

In "Just Between You and Me" you expressed skepticism about all lost mines. Don't be too sure. I know of several that were found again. One after 20 years by the original discoverer and it made him a nice juicy steak too. When I clerked in Tingman's over 40 years ago I saw a good many "pokes" containing from \$265.00 to \$325.00 that came from a mine that can't be far from the shores of Salton sea. It was never exhausted and was never legally located because the man who worked it was not a citizen. His death was caused from the effects of too many heavy "pokes." I cashed the last one, \$285.00, the result of a two weeks trip out of Indio. That mine has been lost for over 40 years. I have never looked for it but I know it is there though plenty who have hunted for it doubt its existence.

ELMO PROCTOR.

Following letter was received by Mr. and Mrs. Everett Ruess of Los Angeles, parents of the young vagabond artist who disappeared in the Utah wilderness in 1934:

Escalante, Utah

Dear Mr. and Mrs. Ruess:

I have just finished reading "On Desert Trails with Everett Ruess" for the second time. While I am still experiencing those inward swirlings I get from reading it, I have decided to write you.

Reading Everett's letters and poems and thinking of his singular philosophy has an effect upon me that I am unable to describe. It makes me loathe people who are afraid of the future, people who sit contentedly in their hopeless surroundings and cast aside any ambition they might have that deviates from the everyday path of life.

I admire Everett tremendously and I only wish I could have been privileged to know him.
Our family have all read the book and enjoy

it equally as much as I. I have shown the book to members of the searching party that looked for Everett and to many of my friends. They find it hard to believe any one would sacrifice so much just to be among surroundings so familiar and prosaic to them.

Escalante is beautiful now. A foot of snow blankets the nearby foothills, but their source of beauty is also exceedingly troublesome to the mail carrier. He has a difficult time traversing Escalante mountain. Perhaps you remember the mountain. Escalante is practically isolated in the wintertime.

IRENE ALLEN.

El Centro, California

Desert Magazine:

I disagree with Mr. Rex Vandeventer's criticism of Marshal South's requirements for visit-ors to Yaquitepec as outlined on the "trail sign." Mr. South's home is his castle and what he does there should be his own affair. We would not like uninvited guests entering the privacy of our homes, and he should be accorded the same privilege. The trail sign should secure the desired privacy, for few if any gentle folk could bring themselves to meet such requirements, only the bold could do so.

EARL R. IREY.

Green River, Utah

Dear Sir,

In a recent issue of Desert Magazine, a writer relates a story about Death Valley Scotty at the time he was living at Humbolt house Nevada. In the foreword preceding this article you mentioned these stories are to be taken for what they are worth and do not guarantee the authenticity of same.

Let me testify to the truth of this narrative except in some minor details, as at this time I was living at Imlay, Nevada, which is only a few miles from Humbolt house, and knew Scotty well. On this particular occasion he stopped off at Imlay and showed a number of us fellows his sack of supposedly high grade ore before proceeding up to Winnemucca. At the time he showed me this ore, his sack contained a live rattlesnake, instead of a dead one as the writer stated.

As to Indian Ike and his fabuously rich mine, he was reported to have some where up black canyon in the Humbolt mountains, I searched for it several times and know the sequel to it. Ike did not peddle his gold on the streets of Winnemucca, as the writer stated but took it to Ben Hubbard, the old time assayer at Winnemucca, who paid him what his gold was worth. He kept the location of his mine a secret and naturally rumors spread of

Ike's Bonanza.

My "sidekick" and I made several trips up into black canyon searching for Ike's mine. Later a Salt Lake mining company induced Ike to give them a bond and lease on his property. Before he would sign any papers, he enlisted the aid of an educated Indian who lived at Lovelock, Nevada, to see that his locations were properly made and the terms of the bond and lease correct. Then Ike made his mark before a notary to this agreement and showed the company officials the location of his mine. Incidently Ike had insisted upon the payment of claenty like had insisted upon the payment of a substantial sum of money before doing this. They soon began work on Ike's claims and I, being curious to know the location of his mine made another trip into Black canyon to see it while the company was at work.

Ike's mine consisted of a large vein of quartz 40 or 50 feet wide as I remember it, in the bottom of a gulch on the mountain side swent bare.

tom of a gulch on the mountain side swept bare by erosion; this quartz was a brownish color with a hard flintlike structure and was what prospectors call a "frozen ledge." That is, it was cemented to each wall of the country rock, and apparently completely barren of values. But on close inspection, one would occasionally find a little splotch of native gold, and probably after days of painstaking work Ike would accumulate a few dollars worth of gold that he sold to Hubbard with which he bought his

few meager supplies.

The mining company started sinking a shaft on this property and after a few weeks work abandoned the property as worthless. It seemed to be one of those freak veins showing a little splotch of gold here and there in otherwise absolutely barren quartz. Assays taken from a cross section of the vein would run only a dollar or two per ton.

I have often thought if Ike should have died

before showing his mine to anyone we would have another one of the fabulously rich lost

L. F. BEDIER.

• East Sandwich, Mass.

Dear Mr. Henderson;

December number just came. Don't for the lawd's sake give up the photographic covers in exchange for art work, however good or bum, usually the latter. What do you want to do, take the joy out of life?

DODGE MacKNIGHT.

Banning, California

Dear friend Henderson:

I note what Frank Jones of Fallon, Nevada, has to say about desert tree and flower seeds.

As you know, desert trees and flowers on the desert may go for a number of years without producing seed. For instance, the desert ironwood is an extreme example. I have found

mature seeds only once in 26 years. Smoke tree seed three times in that period.

This seems to be due to the fact that there is moisture enough for flowers, but the flowers often sap the moisture so there is not enough

left to mature the seed on the trees.

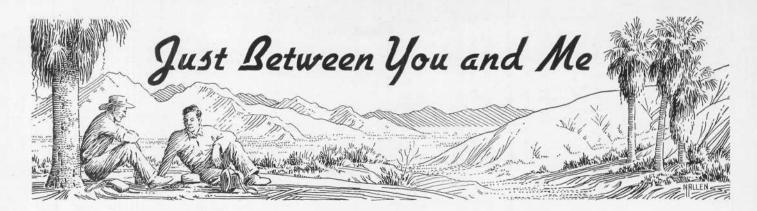
In gathering seed I find I have to compete with a dozen varieties of rodents who often are there ahead of me and also with desert winds.

Nature also has another way of beating the seed gatherer. The pods mature and snap open too quickly. Today you go out and find green pods. Tomorrow you return and find the pod has matured and snapped open, and the seed scattered to the winds.

I have gathered desert seeds and propagated desert plants for many years, and have gone as many as nine times to the same place to secure the ripened seeds at just the right time.

GEORGE W. HILTON.





By RANDALL HENDERSON

EVERAL months ago I followed the winding desert road that leads north from Aguila, Arizona, toward the Bill Williams river at Alamo and thence to Kingman, Arizona.

My destination was Wikieup where my friend Guy Hazen was excavating million-year-old bones from a limestone side-hill. Guy has an uncanny faculty for locating the graveyards of prehistoric birds and reptiles and mammals. For several years he has been on the payroll of the American Museum of Natural history—just scouting over the desert country locating these ancient fossil beds.

The trail I followed to Wikieup and thence to Kingman is one of the "back roads" of western Arizona. It is traveled by a few cattlemen and an occasional miner—but the tourists never penetrate the region. It is a typical desert wilderness—richly endowed by Nature. At one point in the mountainous area north of the Bill Williams the road led over a low summit through one of the finest natural botanical gardens I have ever seen. It is one of the few areas where Joshua trees and huge Saguaro cacti intermingle on the same hillsides. Palo Verde, ocotillo and countless species of other desert shrubs grow so luxuriantly here as to be almost an impenetrable jungle.

My mental picture of this scenic area was recalled just now when I read that the Arizona Highway commission has taken over Highway 93 south of Kingman and is planning to improve the road. Opening of this route to general travel will give visitors easy access to an immense territory that for the most part is still as wild as in the days when the old mountain man, Bill Williams, was trapping beaver along the sandy channel of the river that bears his name.

* * *

While we are on the subject of desert roads I would like to offer a few remarks concerning the need for a north and south highway along the lower Colorado river.

In the old days there were two means of travel along the river. The Indians followed a foot trail on the banks of the stream—and the white men used stern-wheel boats. Neither the Indians nor the boats traveled more than three or four miles an hour. The Indians usually made better time than the stern-wheelers because they did not have to stop and cut mesquite wood for fuel.

That is the way it was 70 years ago—and it isn't much better today. There is a fair road on the Arizona side of the river from Yuma to Parker—but on the California side of the stream, from Imperial valley north to Blythe, the motorist can only chug along over the bumps and hope the springs will hold out to the next waterhole.

Residents of the Colorado desert have been trying for many years to get an improved road up the river. There is great need for such a highway. The chief obstacle is the board of supervisors in Riverside county. They are not what you would call

desert-minded. I've about given up hope that such a road will be built until the old desert rats around Blythe decide to secede and form a new county of their own.

* * *

We've had more rain than usual on the desert this winter. Too many rainy days are depressing to people accustomed to sunshine. Some of my neighbors who have shops on Main street are complaining. Muddy roads and overcast skies hurt business.

They forget perhaps the miracle these rains will bring a little later—a desert carpeted with verdant shrubs and wild-flowers of a thousand brilliant hues. Those flowers not only will bring exquisite beauty to the desert landscape—but they have a cash value as well. I daresay that every dollar lost to the desert roadside shops during these rainy periods will be returned ten-fold by the motorists who will come out to the desert in March and April to witness the spectacle of sand dunes covered with blossoms.

k # 4

I spent New Year's eve in a comfortable cabin at Ruth and Noel Crickmer's peaceful Rancho Borrego—grateful that I live in a land where bomb-proof shelters are not yet necessary. I share the hope of every American that we may never come to that state of affairs.

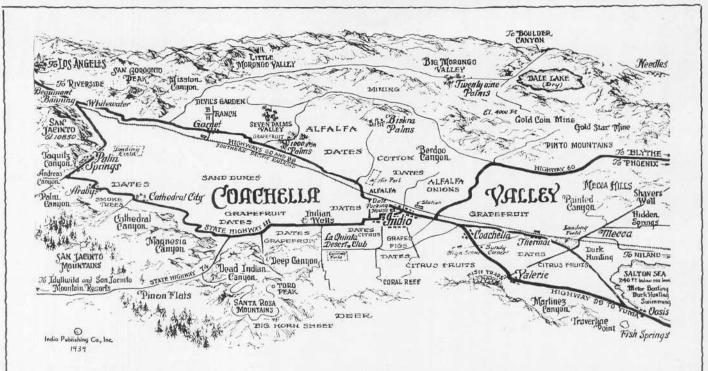
But I have a feeling that if we are to preserve our peace in America it is going to be necessary to impose much more drastic discipline on ourselves than the most of us have yet known.

One of the things I have learned from the desert is that Nature has no permanent place in her scheme of things for softies. It is true in the plant world, in the mineral world, and in the animal world. I have a feeling that we humans are governed by this same natural law of the universe. If we are to survive, either we must have the intelligence and courage to keep our physical, mental and spiritual fibers tough and resistant—or the toughening process will be forced upon us by dictatorial measures.

In America we still have the privilege of choosing our own course. But even in this land where we still have freedom of speech and of worship, there is in the final analysis an increasing tendency toward regimentation—which is nothing more nor less than discipline imposed upon us to compensate for our own stupidity.

As our population increases, our problem grows more complex, and the greater becomes the necessity for self-discipline if we are to escape such regimentation as now exists in the totalitarian states.

Anyway, these are some of the conclusions with which I began the New Year. I have a great deal of faith in the abiltiy of Americans to adjust themselves to the changing order.



This February . . . more than ever . . . follow the

ROADS THAT LEAD TO INDIO

The people of Indio invite you to attend the Riverside county Fair and Date Festival, to be held on the Fair Grounds, Indio, California, February 20th, 21st, 22nd and 23rd, 1941.

An event that many look forward to, this year, more than ever. Come to Riverside County's Mid-Winter Event.

To readers of the Desert Magazine; no ordinary fair is this. This year, as before, all the fun and excitement of the Fair will be here, but, also, there will be prizes and booths for gem and mineral collectors! Not to mention all the other exhibits of interest to desert lovers.

Elsewhere in this issue will be found a listing of the gem and mineral events. Gem and mineral collectors will find much to interest them in these exhibits. Be sure to find it, read it and then plan to be here. For there is no finer hunting ground for rockhounds than the desert around Indio.

Come to Indio for the Fair. Then rest awhile. Play and explore the desert wonders around Indio. For truly when you stay at Indio all the attractions of the desert are right next door.

Take a trip to PAINTED CANYON. A trip you will never forget! Painted canyon . . . a corridor in the Cottonwood mountains which narrows to a sheer walled gorge, its upper reaches a mere crack. And what coloring! Reds, purples, browns, greys, all in strange contrast and combination. Ascending the narrowing gorge you see walls riven and scored with mysterious side canyons and, looking up gaze at spires and tower-rocks where the shadows shift with the minutes.

As you wander through the Painted Canyon, through a maze of carved and tinted corridors peace will come to your soul — far beyond the limit of any other inspired emotion we know.

No matter what your vacation desires may be, come to Indio.

There are so many things to do and see. And the friendly people of Indio all helping to make your stay as pleasant as possible.

Indio is easy to reach. Just a few hours from Los Angeles it is the most direct route to and from the large centers of Southern California. Come to Indio for the winter and the fair. Stay at Indio on your trips to the many wid-winter events in the valley.

For information about the Fair and Date Festival, Painted Canyon, scenic side trips, accommodations or any other question please write to the Secretary, Chamber of Commerce, Indio, California.

Make the most of the desert's pleasures. Make straight for . . .

INDIO

CALIFORNIA

Joshua Trees Lost Peg-Leg Gold Mine Clues Yucca Valley Keys View Mesquite Lake 49 Palms Ganyon Bottle Weeds in bloom Dead Man Lake **Bullion Mountain** 29 Palms Oasis . . . the Old Dale Gold Mining District Split Rock Rainbow Ganyon ... rich Gem and Mineral fields Giant Rock Airport and Cave

"IN ALL THE WORLD NO PLACE LIKE THIS"

Inspiration Point - - on clear days you can see Mexico

. . . you have heard this phrase before and it has come to mean little. But spend a day at 29 PALMS . . . then you will agree as so many others have before you that "in all the world no place like this."

.. 29 PALMS is an oasis . . . the only oasis of its kind in the United States. A thriving community in a unique and picturesque desert surrounded by mountains. Here horseback riding, outdoor sports or just sunlazing offer recreation in happy contrast to city life.

... if you possess the desert exploring mania the canyons and desert around 29 PALMS will be your paradise. A trip to any of the places listed at the top of this page will repay you many times in pleasure and astonishment.

. . . Health seekers: Scientists report that the beneficial effects from the ultra-violet rays of the sun are of a higher degree here than can be found anywhere on the continent.

... nearby is the newly created Joshua Tree National Monument, an area of 825,340 acres of Joshua trees, rock formations, cacti, Indian pictographs and petroglyphs, set aside by our national government for your pleasure.

Hidden Valley

... in the historic Dale mining district there are scores of tunnels and shafts, some of them now producing rich ore . . . in the Bullion mountains to the north are the semi-precious gem areas where agate is found in many beautiful forms. Good desert roads lead in all directions. You'll enjoy the mild sunshiny days and the crisp invigorating nights at Twentynine Palms.

... Come to 29 PALMS for a day. You will come back again and again.

The People of . . . 29 PALMS